S. HRG. 101-706

ROUNDTABLE HEARING ON THE SAFETY AND SOUNDNESS OF FANNIE MAE AND FREDDIE MAC

HEARING

BEFORE THE

SUBCOMMITTEE ON
HOUSING AND URBAN AFFAIRS

OF THE

COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

THE SAFETY AND SOUNDNESS OF THE FEDERAL NATIONAL MORTGAGE ASSOCIATION [FANNIE MAE] AND THE FEDERAL HOME LOAN MORTGAGE CORPORATION [FREDDIE MAC]

FEBRUARY 7, 1990

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THE SAFETY AND SOUNDNESS OF FANNIE MAE AND FREDDIE MAC

WEDNESDAY, FEBRUARY 7, 1990

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
SUBCOMMITTEE ON HOUSING AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-538 of the Dirksen Senate Office Building, Senator Alan Cranston (chairman of the subcommittee) presiding.

Present: Senators Cranston, Riegle, Sarbanes, D'Amato and Pressler.

OPENING STATEMENT OF SENATOR CRANSTON

Senator CRANSTON. Good morning, and welcome to you all.

This morning's hearing continues the subcommittee's oversight of the operations of the secondary mortgage market. We focus today on Fannie Mae and Freddie Mac. These two institutions are enormously important pillars of the country's home mortgage finance system.

They helped make the American family's home mortgage into one of the most attractive investments in international capital markets. They have reduced the cost of homeownership for millions of families. They have helped to provide mortgage credit at the lowest possible cost consistently in every part of the country.

Fannie Mae and Freddie Mac provide a powerful foundation for the mortgage lending industry. They enable mortgage lenders to operate with great efficiency, and manage their risks well. The actions of Fannie Mae and Freddie Mac prevented the thrift crisis from being even worse, by providing vital liquidity to thrift institutions through various swap programs.

Today's oversight hearing is simply an exercise in prudence. From all reports, the management of both Fannie Mae and Freddie Mac has been of high quality in recent years. I have great respect for their two leaders, David Maxwell and Leland Brendsel. David has been particularly helpful to this subcommittee in working with Jim Rouse and the task force. Leading analysts consider both agencies to be in sound financial condition. Their net income was over $1.2 billion for fiscal year 1989.

But the Subcommittee on Housing and Urban Affairs has a clear responsibility for ongoing oversight of the secondary home mortgage market, and of Fannie Mae and Freddie Mac in particular. I take that responsibility very seriously. I believe that congressional oversight is most effective if it is carried out when things seem to be going well, not when a crisis is upon us.

Our concern is for the future. We want to make sure that Fannie Mae and Freddie Mac are going to be financially sound institutions, that they continue to strengthen the Nation's home mortgage system, and that they continue to make housing more affordable for American families.

This morning, we will consider the administration's efforts to provide prudent oversight of Fannie Mae and Freddie Mac. Last year, Congress gave HUD clear responsibility for regulation of these two institutions. I expressed my high regard for the leaders of those two institutions, I also want to express my high regard for the Secretary of HUD, Jack Kemp, who I think is doing a very fine job in a very difficult role.

We will review HUD's progress to date, and the Department's future plans for carrying out that authority. We will also consider the concerns of some that HUD may not be able to provide effective oversight of the secondary home mortgage market.

It is my concern that oversight of Fannie Mae and Freddie Mac be competent, thoroughgoing, and, again, prudent. We need to make sure that regulation of these agencies will keep them focused on the larger public purposes that underlie their charters.

These are that regulation will enhance attention to prudent business practices, and regulation will enable these two agencies to continually innovate and respond to rapidly changing market requirements.

Second, we will consider how the activities of Fannie Mae and Freddie Mac create risks for the Federal Government. I am particularly concerned about how changes in the economy or changes in the business strategies of Fannie Mae or Freddie Mac may increase those Federal risks in ways that are not foreseen by Congress.

Fannie Mae and Freddie Mac together have about $560 billion in outstanding, mortgage-backed debt. That is an enormous figure. Some have raised concerns that an implicit Government guarantee on those securities could expose the Government to another financial crisis. We will explore that extremely important issue here this morning. We will continue to keep it under review in the months to come.

Third, we will consider the financial soundness of Fannie Mae and Freddie Mac. We want to make sure that the capital reserves of the agencies are adequate to avoid financial instability in the event of an economic recession, or rather adverse market conditions. A number of other important issues will also rise in our discussions, so we have a very full agenda this morning.

As you see, this morning's hearing will be conducted not in the normal, formal hearing way, but as a roundtable discussion. Participants in earlier roundtables have found that this format permits a more open and useful discussion of ideas among witnesses and subcommittee members.

I encourage everyone at the table to be forthright in your comments. It is especially important that you speak up, if you have differences of opinion with anything that is said here. It is most helpful to the committee if we get different views, and where you have a difference, that that is clearly expressed. I also urge you to be brief in your comments, so that all can participate.

We have an outstanding group of witnesses at the table. I am grateful to have received your written testimony. That testimony will be included in the hearing record. We have much ground to cover, in a short period of time. I will try to move the discussion along to include all of you and all of the issues on the discussion guide that is before you.

[The complete prepared statement of Senator Cranston follows:]

PREPARED STATEMENT OF SENATOR CRANSTON

Good morning and welcome.

This morning's hearing continues the subcommittee's oversight of the operations of the secondary mortgage market.

We focus today on Fannie Mae and Freddie Mac. These two institutions are enormously important pillars of the country's home mortgage finance system. They helped make the American family's home mortgage into one of the most attractive investments in international capital markets. They have reduced the cost of home ownership for millions of families. They have helped provide mortgage credit at the lowest possible cost consistently in every part of the country.

Fannie Mae and Freddie Mac provide a powerful foundation for the mortgage lending industry. They enable mortgage lenders to operate with great efficiency and manage their risks. The actions of Fannie Mae and Freddie Mac prevented the thrift crisis from being even worse by providing vital liquidity to thrift institutions through various "swap" programs.

Today's oversight hearing is preventive. From all reports, the management of both Fannie Mae and Freddie Mac has been of high quality in recent years. Leading analysts consider both agencies to be in sound financial condition. Their net income was over $1.2 billion for fiscal year 1989.

But the Subcommittee on Housing and Urban Affairs has a clear responsibility for ongoing oversight of the secondary home mortgage market—and of Fannie Mae and Freddie Mac in particular. I take that responsibility very seriously.

I believe that congressional oversight is most effective if it is carried out when things seem to be going well—not when a crisis is upon us.

My concern is with the future. I want to make sure that Fannie Mae and Freddie Mac continue to be financially sound institutions, that they continue to strengthen the Nation's home mortgage system, and that they continue to make housing more affordable for American families.

This morning, we will be considering a number of important issues related to the ways in which Fannie Mae and Freddie Mac involve risks to the Federal Government.

First, we will consider the administration's efforts to provide prudent oversight of Fannie Mae and Freddie Mac. Last year, Congress gave HUD clear responsibility for regulation of these two institutions. We will review HUD's progress to date and the Department's future plans for carrying out that authority. We will also consider the concerns of some that HUD may not be able to provide effective oversight of the secondary home mortgage market.

It is my concern that oversight of Fannie Mae and Freddie Mac be competent, thoroughgoing and prudent. We need to make sure that regulation of these agencies will keep them focused on the larger public purposes that underlie their charters; that regulation will enhance attention to prudent business practices; and that regulation will enable these two agencies continually to innovate and respond to rapidly changing market requirements.

Second, we will consider how the activities of Fannie Mae and Freddie Mac create risks for the Federal Government. I am particularly concerned about how changes in the economy or changes in the business strategies of Fannie Mae or Freddie Mac increase those Federal risks in ways that are not foreseen by Congress.

Fannie Mae and Freddie Mac together have about $560 billion in outstanding mortgage-backed debt. That is an enormous figure. Some have raised concerns that an implicit Government guarantee on those securities could expose the Government to another financial crisis. We will explore that extremely important issue here this morning, and we will continue to keep it under review in the months to come.

Third, we will consider the financial soundness of Fannie Mae and Freddie Mac. I want to make sure that the capital reserves of the agencies are adequate to avoid financial instability in the event of an economic recession or other adverse market conditions.

A number of other important issues will also arise in our discussion. We have a full agenda this morning. As you see, this morning's hearing will be conducted as a roundtable discussion. Participants in earlier roundtables have found that this format permits a more open and useful discussion of ideas among witnesses and subcommittee members.

I encourage everyone at the table to be forthright in your comments—it is especially important that you speak up if you have differences of opinion with anything that is said here. That is the best way for the committee to explore the issue before us this morning. I also urge you to be brief in your comments so that everyone can participate.

We have an outstanding group of witnesses. I am grateful to have received your written testimony. That tesimony will be included in the hearing record.

We have much ground to cover and a short period of time. I will try to move the discussion along to include all of the issues on the discussion guide that is before you.

So, let us begin the discussion.

Senator Cranston. Before we start the discussion, I want to recognize the chairman of the full committee, Don Riegle, for any remarks he wishes to make. I am glad that you are here, Don.

OPENING STATEMENT OF CHAIRMAN RIEGLE

Senator Riegle. Thank you very much, Senator Cranston.

I think this is a very useful and valuable format that you have arranged today.

Clearly, the safety and the soundness of Government-sponsored enterprises like Fannie Mae and Freddie Mac are an important issue, and I commend you for the effort that you are commencing today on this subject.

I think other problems that we have seen make it clear to us that we had better look ahead and understand what may be going on, and take whatever steps are needed to strengthen the system, if they are called for.

At the full committee level, we held a hearing on all GSE's last October, and I anticipate further hearings next May after Treasury and the GAO submit their reports required by last year's thrift bill. I think the focus today on Fannie Mae and Freddie Mac is particularly appropriate, because these two institutions are the two largest Government-sponsored enterprises.

Debt issued or guaranteed by them currently amounts to more than $600 billion. Their combined equity capital, however, is only $4.6 billion, or only eight-tenths of 1 percent. That is far less than the minimum accepted ratio for banks and thrifts now in place, of 3 percent.

At our October hearing, Standard and Poor's reported that, based on publicly available information, they would rate the risk level of these firms to the Government at minimum investment grade, not far above a junk bond rating. Moody's has estimated that, based on historical data, about 4 percent of such firms can be expected to default within a 10-year period.

While that may sound comforting to some, I think the magnitude of the debt outstanding is so huge that the risk is still a considerable one, and one that we have to understand fully. And should they deteriorate by one rating category then, according, again, to the long historical experience, the default rate jumps up to about 14 percent.

Because of the implicit Government guarantees on the debt, normal market discipline I think is largely absent. So we have to depend on agency supervision. And in the safety and soundness area, that supervision appears to be I think minimal, although I am willing to hear arguments to the contrary today.

I think this poses for us, however, some serious questions. Is Standard and Poor's risk assessment essentially accurate? If it is, what can we do to reduce risk without substantially impairing the operation of the secondary mortgage market, which is absolutely critical to our system of housing finance? And, how can we best improve Government oversight?

I also want to note that both Freddie Mac and Fannie Mae have given careful attention to the adequacy of their capital in recent years. They have worked hard to reduce interest rate risk, and by retaining earnings they have added substantially to their capital base. Their special programs for low and moderate income families have not gone unnoticed, either. Certainly, the experts on today's panel are highly qualified to discuss these matters and I think give us their guidance as we look at these issues.

I might just finally say, Senator Cranston, that the Finance Committee today is meeting to review the effect of the trade bill at this very hour, and I am a member of that committee, as you know. And we have Lane Kirkland testifying on health care requirements in the country before the Budget Committee.

Senator CRANSTON. You are about to say you have to leave us.

Senator RIEGLE. So I will be going back and forth between the three committees this morning. But I want to say to each of the witnesses here today that I appreciate the expertise that they bring, their commitment to these questions and issues, and their interest in what they have to say to us today.

Thank you.

Senator CRANSTON. Thank you very much, Don.

The way we will proceed now is to first hear from Under Secretary Al DelliBovi, have a wee bit of discussion with him—there are a few questions I would like to put to him. And then, very brief presentations from David Maxwell and Leland Brendsell. And then, we will start the roundtable discussion.

Mr. STANTON. Mr. Chairman, if I may apologize, but I would like to raise a point of order.

Three members of this panel today are academics, and it has come to my attention that two of them have been retained by Freddie Mac to assist that corporation in discussing its capitalization.

And I would appreciate it if people could please disclose any financial interest that might preclude independent testimony.

Senator CRANSTON. Fine. You all have a list, I believe, before you of who is here. So we will not take the time to go around the table and have each person introduced.

Before we begin I have a statement from Senator Sasser.

OPENING STATEMENT OF SENATOR SASSER

Senator SASSER. Today, we will explore the safety and soundness of two of our success stories, Fannie Mae and Freddie Mac. These Government-sponsored enterprises have revolutionized the home loan mortgage market. They have provided the first-time buyer with access to international capital markets. By adding liquidity to loan portfolios, Fannie Mae and Freddie Mac have made home mortgages a more attractive investment for banks and savings and loans across the country. And, they have measurably lowered the cost of mortgages to all purchasing mortgages within conforming loan limits. Many, many more Americans own homes now, as a result of the work of these agencies than would otherwise. Moreover, these GSE's have accomplished this while showing a profit.

Nevertheless, it is suitable that we hold this hearing today to look at the capital adequacy of the housing GSE's and to reassure ourselves that the financial soundness of Fannie Mae and Freddie Mac are beyond question. Since these agencies have an implicit Government guarantee, we must make sure that an economic setback for either GSE won't hang taxpayers out to dry. All too recently, we have learned the bitter price of a Government guarantee accompanied by lax oversight and insufficient capital.

I commend the chairman for this timely hearing and I look forward to the testimony from the distinguished panel of witnesses.

So, Al, would you start out?

STATEMENT OF ALFRED A. DELLIBOVI, UNDER SECRETARY, U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, DC

Mr. DelliBovi. Thank you, Mr. Chairman, members of the subcommittee.

HUD appreciates this opportunity to describe its regulatory authority over Fannie Mae and Freddie Mac. And because you have included our full statement in the record, I will just review some of the highlights.

I am accompanied today by John Weicher, our Assistant Secretary for Policy Development and Research.

In its exercise of regulatory responsibilities since 1968, HUD oversight of Fannie Mae has involved a number of issues. And it is fair to say that HUD does not have a systematic approach in either the philosophy or the management of its regulation of Fannie Mae.

Yet during this period, two issues can be consistently seen in HUD's efforts to carry out its responsibilities: One, concern with Fannie Mae's public purpose, and two, concern with maintaining the financial soundness of Fannie Mae to reduce potential risks to the Federal Government. These basic concerns remain, and they now apply also to Freddie Mac.

Now initially, FIRREA made the Secretary Freddie Mac's regulator, and it also put the Secretary of HUD on the Freddie Mac board of directors until a board was elected by the shareholders. Since these interests could conflict, FIRREA placed the Secretary in a very difficult position with regard to Freddie Mac.

That, by the way, ended yesterday, when the Secretary no longer was an interim board member when the Freddie Mac shareholders elected a permanent board.

Now, by virtue of their Federal charters, Freddie Mac and Fannie Mae receive a number of benefits that are not available to purely private firms. These include, among others, authority to borrow from the U.S. Treasury.

The price of these benefits is a number of restrictions on permissible activities, and direct Federal Government exercise of regulatory authority over the agencies. The purpose of HUD regulation, as defined in the charter acts by FIRREA and as exercised in the past, is simply to ensure that the activities of Freddie Mac and Fannie Mae serve the public purpose for which these entities were created, and to ensure that the activities of Freddie Mac and Fannie Mae do not create unreasonable risks for the Federal Government. HUD has never interpreted its regulatory responsibilities as requiring the Department to become involved in the day-to-day management of Fannie Mae, and we would not do so for Freddie Mac either.

Now combined, Fannie Mae and Freddie Mac run a mortgage business in excess of $600 billion. Both Fannie Mae and Freddie Mac are important to the growth and efficient operation of the primary and secondary mortgage markets. Therefore, we recognize that the prevention of financial difficulties is of paramount importance to the economy, and key to effective regulation.

The major concern with the agencies are the interest rate and credit risks associated with their mortgage operations. We believe that Congress shares this concern, as manifested by your requirement for studies of capital standards by the GAO and reviews of the business interest rates and management risks by the Department of Treasury. An unduly low level of capitalization can place the agencies in financial danger, and impose costs on the taxpayer and disruption to the economy.

Now, credit risk is the risk of financial loss to the mortgage owner or insurer due to unexpectedly high rates of borrower default. Credit risk is therefore a factor for both Fannie Mae and Freddie Mac. Interest rate risk, on the other hand, arises when long-term mortgage assets are financed with short-term debt. In this case, a rise in interest rates reduces the net market value of a mortgage holder, because of the increased interest costs of rolling over the short-term debt.

Both agencies' mortgage backed security operations are well matched, and do not involve interest rate risk. I would like to note here that Freddie Mac recently took the very useful step of publishing its mark-to-market net worth. This calculation provides HUD, as a regulator, with a point of time market evaluation of the assets and liabilities of Freddie Mac.

Now, a fundamental regulatory question is, how much capitalization Fannie Mae and Freddie Mac should have, given their associated risks. HUD has used several approaches in examining the capitalization issue, including extrapolation of risk-based capital requirements, such as those recently imposed on the thrift industry; mark-to-market evaluations of the agencies' business; simulation studies of the effects of various economic eventualities on the solvency of the agencies; analyses by Standard and Poor's of Fannie Mae's potential debt rating without agency status; and other approaches that appear in the literature on financial institutions.

We consider adequate capitalization of Fannie Mae and Freddie Mac to be a primary concern. FIRREA mandated a study of the need for risk-based capital standards for GSE's to be conducted by the GAO. That study is due in May. In addition, Treasury is working on a similar study.

We intend to take the results of those studies with utmost seriousness, and to respond appropriately to any findings which indicate that higher standards are needed to protect the Government's interest.

HUD's strategy will be, A, to closely monitor the agency's interest rate and credit risks; and B, to ensure adequate capital exists to protect the Federal Government from these risks.

Both Freddie Mac and Fannie Mae published detailed financial reports for the benefit of market analysts. In addition to this information, HUD plans to collect data related to credit and interest rate risk. Although HUD does receive internal data periodically from Fannie Mae, we will be asking for additional information from both agencies to improve our understanding of their credit risks. The data will be reviewed quarterly to ensure timely monitoring of the risk.

HUD is going to take very seriously its congressional mandate to prepare annual reports on Fannie Mae and Freddie Mac, and we will use the reports for the purpose of updating the Congress on the risk of the agency operations. In the past, HUD had not incorporated its regulatory responsibilities systematically into its management structure.

Because of the seriousness of these responsibilities, and because of the related duties given to him by FIRREA, Secretary Kemp established last August a regulatory review board within HUD to advise him on carrying out these FIRREA-related responsibilities.

The review board is comprised of myself, as chairman, the general counsel, the Assistant Secretary for Housing, the Assistant Secretary for Policy Development and Research, the Assistant Secretary for Community Planning and Development, and the President of the Government National Mortgage Association.

The board will collect the necessary information on appropriate regulatory actions, and formulate options and make recommendations to Secretary Kemp on actions and decisions.

HUD, Mr. Chairman, is prepared to carry out its responsibilities to the Congress and to the American people, with respect to both Freddie Mac and Fannie Mae. Mr. Chairman, President Bush and Secretary Kemp are committed to the goals of expanding homeownership and affordable housing opportunities for all Americans.

Congress placed the regulatory oversight of Fannie Mae and Freddie Mac in the hands of the HUD Secretary because of the essential roles these agencies play in the housing interests of the nation. And they have done a good job in fulfilling those roles.

Secretary Kemp takes his role as the regulator seriously, and he is committed to ensuring that both agencies remain financially sound and able to carry out their operations in support of homeownership. They have done a good job, and we want them to continue to do a good job of providing affordable housing for Americans.

Thank you, Mr. Chairman. We will be pleased to participate as you wish.

Senator CRANSTON. Thank you very much.

[The complete prepared statement of Alfred A. DelliBovi follows:]

TESTIMONY ON HUD OVERSIGHT OF FNMA AND FHLMC
by Alfred A. DelliBovi
before
SENATE BANKING COMMITTEE
February 7, 1990

Thank you, Mr. Chairman and Members of the Subcommittee. HUD appreciates this opportunity to describe its regulatory authority over FNMA and FHLMC, the ways in which FIRREA changed this authority, and how HUD views its role as a regulator of these important government sponsored enterprises.

HUD'S REGULATORY AUTHORITY

Basis of Regulation

FNMA was established in 1938 as a Federal government agency; Congress re-chartered FNMA as a private firm under HUD oversight in 1968. At that time FNMA's special assistance and management and liquidating functions were split off into GNMA, and FNMA was reconstituted into a stockholder-owned corporation with a Board of Directors predominantly elected by the stockholders. This Board was granted authority "to determine the general policies which shall govern the operations of the corporation." Congress anticipated that FNMA could operate as a profitable firm while performing a useful function -- in effect, "doing well by doing good". Simultaneously, the Secretary of Housing and Urban Development was given the responsibility to exercise "general regulatory power" to ensure that FNMA's public purposes are accomplished.

In 1968 the functions of the old FNMA that require subsidy were transferred to GNMA, a wholly Government-owned corporation within HUD. Subsequently GNMA, pursuant to statute, developed the first successful mortgage backed securities (MBS) program. The MBS program eventually became GNMA's major activity. Historically, 95% of all FHA and VA mortgages are securitized through GNMA.

In 1970, FHLMC was created to develop its own secondary market operation for savings and loans, functioning within the Federal Home Loan Bank System and governed by the Federal Home Loan Bank Board. Last year, the Bank Board was dissolved by the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA). FHLMC was established as an independent government sponsored entity with its own Federal charter, drafted largely to resemble FNMA's. In FIRREA, Congress specified that FHLMC's Charter would be changed so that the agency would be governed by a public Board of Directors, just like FNMA's. In addition, Congress assigned to the Department of Housing and Urban Development oversight responsibility to protect the interests of the Federal Government, giving HUD general regulatory authority to achieve that end.

FIRREA is a further recognition by Congress of the preeminent role of the Secretary of Housing and Urban Development in conducting a unified national housing policy. In reforming the thrift industry, Congress realized that the interests of housing, particularly housing for low and moderate income families, are important and need to be preserved and asserted. To advance this goal, Congress called upon the Secretary of Housing and Urban Development to provide oversight and policy direction. In addition to HUD oversight responsibility for FHLMC and FNMA, FIRREA placed the HUD Secretary on the Oversight Board of the Resolution Trust Corporation and on the Federal Housing Finance Board, recognizing the importance of all those agencies to our nation's affordable housing goals.

HUD's Regulation of FNMA

FNMA's particular role in housing finance has, from the beginning, been to help maintain liquidity in the secondary market. In its exercise of regulatory responsibilities since 1968 HUD oversight of FNMA has involved a number of issues. It is fair to say that HUD has not had a systematic approach in either the philosophy or the management of its regulation of FNMA. Yet during this time two issues can be consistently seen in HUD's efforts to carry out its responsibilities:

- Concern with FNMA's public purpose; and
- Concern with maintaining the financial soundness of FNMA to reduce potential risks to the Federal Government.

These basic concerns remain, and they now apply also to Freddie Mac.

HUD's Regulation of FHLMC

Initially FIRREA made the Secretary FHLMC's regulator and it also put the Secretary on FHLMC's Board of Directors until a Board was elected by the stockholders. Thus the Secretary was responsible for protecting both the interests of the Federal Government and the interests of FHLMC's stockholders. Since these interests can conflict, FIRREA placed the Secretary in a difficult position. For an interim period, HUD was therefore careful about the exercise of its regulatory authority with respect to FHLMC. FHLMC's stockholders elected a Board of Directors, so HUD's role on the interim board will cease.

Purpose of HUD's Regulation

By virtue of their Federal charters, FHLMC and FNMA receive a number of benefits not available to purely private firms. These include among others, authority to borrow $2.25 billion from the U.S. Treasury; exemption from SEC rules on registration of securities; exemption from state and local taxation; exemption from many State-level securities (Blue Sky) laws and perhaps most important of all, the prerogative granted to banks, savings associations, and many fiduciary, trust, and public funds, to hold and use FNMA and FHLMC securities interchangeably with Treasury securities for many purposes. The major securities rating agencies have determined that FNMA and FHLMC securities merit "agency status," a presumption of very low risk to investors because they treat the securities of FNMA and FHLMC as having an implicit Federal guarantee. This perception has allowed FNMA and FHLMC to raise funds at rates only slightly above those paid by the U.S.Treasury.

The price of these benefits is a number of restrictions on permissible activities, and direct Federal government exercise of regulatory authority over the agencies. The purpose of HUD regulation, as defined in the Charter Acts by FIRREA and as exercised in the past, is simply:

- To ensure that the activities of FHLMC and FNMA serve the public purpose for which these entities were created.

- To ensure that the activities of FHLMC and FNMA do not create unreasonable risks for the Federal Government.

HUD will continue to base its oversight and regulatory activities on these two principles.

HUD has never interpreted its regulatory responsibilities as requiring HUD to become involved in the day-to-day management of either FHLMC or FNMA. HUD respects the management prerogatives of both organizations. Indeed, the statutory and regulatory history indicates that Congress did not intend for HUD to become involved in the routine operations of either agency.

However, HUD also believes that its regulatory responsibilities require it to review and, if necessary, indicate objections to the general business strategy of either organization if HUD believes that the general business strategy is either inconsistent with the public purpose of these organizations or presents unreasonable risks to the Federal Government.

AGENCY RISK AND APPROPRIATE HUD OVERSIGHT

Combined, FNMA and FHLMC run a mortgage business in excess of $600 billion: $120 billion in FNMA's portfolio, $230 billion in

FNMA's mortgage-backed securities, and $258 billion in FHLMC's mortgage-backed securities or almost one-third of residential mortgages outstanding. Both FNMA and FHLMC are important to the growth and efficient operation of the primary and secondary mortgage markets. Therefore, we recognize that the prevention of financial difficulties is of paramount importance to the economy and key to effective regulation.

The major concern with the agencies is the interest rate and credit risks associated with their mortgage operations. We believe that Congress shares this concern, as manifested in your requirement for studies of capital standards by the GAO and reviews of business, interest rates and management risks by the Treasury. An unduly low level of capitalization can place the agencies in financial danger, and impose costs on the taxpayer and disruption to the economy.

Credit Risk

Credit risk is the risk of financial loss to the mortgage owner or insurer due to unexpectedly high rates of borrower default. Low inflation and problems in the energy belt have recently shifted attention to credit risk.

Credit risk is present in portfolio operations where FNMA owns the mortgage directly, but it is also present in pass-through security operations such as FNMA's and FHLMC's, where the agency acts as an insurer against lender default that would otherwise prevent the investors from recovering their funds. Credit risk is therefore a factor for both FNMA and FHLMC.

Interest Rate Risk

Interest rate risk arises when long term mortgage assets are financed with short term debt -- in this case a rise in interest rates reduces the net market value of a mortgage holder because of the increased interest costs of rolling over the shorter-term debt.

FNMA has a $120 billion mortgage portfolio. This portfolio is financed with debt which, on average is of shorter term than the mortgages. The strategy of funding longer term assets with shorter term debt is risky, because when interest rates rise assets fall more in value than do liabilities. FNMA's management has prudently moved in the direction of matching the term of its mortgage assets and its debt more closely. Nonetheless, FNMA could be vulnerable to a sustained spike in interest rates although not currently anticipated.

FHLMC's mortgage portfolio is on the order of $10 billion and reportedly has well-matched assets and liabilities, exposing FHLMC to much less interest rate risk. In addition, both agencies' mortgage-backed security operations are well-matched and do not involve interest rate risk. I would like to note here that FHLMC recently took the useful step of publishing its mark-to-market net worth. This calculation provides HUD as regulator with a point-of-time market evaluation of the assets and liabilities of FHLMC.

Capitalization

A fundamental regulatory question is how much capitalization FNMA and FHLMC should have, given their associated risks

HUD has used several approaches in examining the capitalization issue, including (1) extrapolation of risk-based capital requirements such as those recently imposed on the thrift industry, (2) mark-to-market valuations of the agencies' business, (3) simulation studies of the effects of various economic eventualities on the solvency of agencies, (4) analyses by Standard and Poor's of FNMA's potential debt rating without agency status, and (5) other approaches that appear in the literature on financial institutions. We consider adequate capitalization of FNMA and FHLMC to be of a primary concern. FIRREA mandated a study of the need for risk-based capital standards for GSEs to be conducted by GAO. That study is due in May. In addition, Treasury is also working on a similar study. We are maintaining contact with the groups at the Treasury Department and at GAO, and we are continuing to develop our own analyses of agency capital in comparison to agency risk. We intend to take the results of those studies with utmost seriousness and to respond appropriately to any findings which indicate that higher standards are needed to protect the government's interest.

Monitoring to Control Risks

HUD's strategy will be (a) to closely monitor the agencies' interest rate and credit risks and (b) to ensure adequate capital exists to protect the Federal government from these risks. As already mentioned, HUD has developed a cash flow simulation model of FNMA's income and balance sheet. This modeling capability provides not just mark-to-market and duration gap measures, but dynamic simulation of consequences of economic changes and different management strategies on corporate growth rates and maturities of debt instruments issued. Over the coming months we will develop the capability to analyze FHLMC along these lines.

Both FHLMC and FNMA publish detailed financial reports for the benefit of market analysts. In addition to this information, HUD plans to collect data related to credit and interest rate risk. Although HUD does receive internal data periodically from FNMA, we will be asking for additional information from both agencies to improve our understanding of their credit risks. The data will be reviewed quarterly to ensure timely monitoring of risk.

Annual Reports

HUD takes seriously its Congressional mandate to prepare annual reports on FNMA and FHLMC and will use these reports for the purpose of updating the Congress on the risk of agency operations. We plan to submit a joint 1988/1989 report on FNMA, as well as a 1989 report on FHLMC. HUD will base these reports on data received from both agencies. We take the capitalization issue seriously and will monitor agency risks with care. Regularized analysis and reporting processes are being established.

Coordination of HUD Policy-Making

In the past HUD had not incorporated its regulatory responsibilities systematically into its management structure. Because of the seriousness of these responsibilities and because of the related duties given to him by FIRREA, Secretary Kemp established last August a Regulatory Review Board to advise him on carrying out his responsibilities.

The Review Board comprises myself, the General Counsel, the Assistant Secretary for Housing-FHA Commissioner, the Assistant Secretary for Policy Development and Research, the Assistant Secretary for Community Planning and Development, and the President of the Government National Mortgage Association. The

Board will collect the necessary information on appropriate regulatory actions and formulate options and make recommendations to Secretary Kemp on actions and decisions.

CONCLUSION

HUD is prepared to carry out its responsibilities to the Congress and to the American people with respect to both FHLMC and FNMA.

- HUD understands its regulatory mission;
- HUD has put into place a mechanism to carry out this responsibility;
- HUD will require FHLMC and FNMA to provide HUD with the data necessary to adequately monitor their risks;
- and we will not hesitate to act, consistent with our regulatory authority, to correct any problems we find.

Mr. Chairman, President Bush and Secretary Kemp are committed to the goals of expanding homeownership and affordable housing opportunities for all Americans. Congress placed the regulatory oversight of FNMA and FHLMC in the hands of the HUD Secretary because of the essential role these agencies play in the housing interests of the nation. Secretary Kemp takes this role seriously and is committed to ensuring that both agencies remain financially sound and able to carry out out their operations in support of homeownership.

Thank you for this opportunity to share these views with you. I would be pleased to answer any questions.

Senator CRANSTON. I would like to take the liberty of asking a few questions of Al, and then we will go to Mr. Maxwell and Mr. Brendsel, and then we will start the roundtable.

Some have questioned the HUD inclination and capability of regulating Fannie Mae and Freddie Mac. They point to a statement made by HUD officials in 1985 to the GAO that, "The Department lacks the capacity or expertise to be a financial regulator responsible for supervising Fannie Mae's risk taking." I realize that was 3 years ago.

What changes have been made to develop expertise in regulating Fannie Mae and Freddie Mac, and what additional staff capacity, if any, do you now need?

Mr. DELLIBOVI. Well, Mr. Chairman, as all America now knows, that statement made in 1985 could well have been applied not only to HUD's regulatory responsibility of Fannie Mae, but indeed its management attention to a host of issues.

Senator CRANSTON. Yes.

Mr. DELLIBOVI. And as you noted, and Secretary Kemp will appreciate it when I tell him, we have made substantial changes in the management of HUD.

We believe we have the capacity and the capability to carry out this responsibility. As I indicated, we have not fully defined the responsibility. We may have to focus on the resource issues, in terms of how we are going to carry it out. But I am confident that the mechanism that the Secretary has established, this regulatory review board, which enables us, by the way, to draw from the staffs of each of those individuals, will provide us with the resources we need to exercise that responsibility. And if we need any additional help, I think you know that the Secretary will not be bashful in coming to you and asking for that assistance if we determine we need it.

Senator CRANSTON. I am sure he will not.

What further plans do you have for ensuring that oversight is competent, thoroughgoing, and prudent?

Mr. DELLIBOVI. We have met with the staffs of both Fannie Mae and Freddie Mac. We are meeting internally to devise the types of information that we will be requesting from each of those agencies. Now that we are freed of the conflicting fiduciary responsibility to Freddie Mac, we expect to be able to move out smartly, and Mr. Weicher's staff is proceeding to do that at this very moment.

Senator CRANSTON. How would you compare your role in supervising or overseeing Fannie Mae and Freddie Mac, with the role of the FDIC in regulating banks?

Mr. DELLIBOVI. I would like Mr. Weicher to answer that question.

STATEMENT OF JOHN WEICHER, ASSISTANT SECRETARY FOR POLICY DEVELOPMENT AND RESEARCH, U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, DC

Mr. WEICHER. Mr. Chairman, we have not had the responsibility for evaluating the day-to-day management and risks that are undertaken by Fannie and Freddie. It has been construed as a general policy oversight.

We have the authority to approve new types of both assets and liabilities for Fannie Mae. That has been an ongoing responsibility of HUD over many years. Our role has not been defined to be as extensive as the role of a typical bank regulator dealing with a commercial bank or with an S&L.

Senator CRANSTON. Some have suggested that the Department of the Treasury, or an independent GSE regulator, should be established to regulate Fannie Mae and Freddie Mac. Do you believe that such a change would improve oversight? And what would be the impact on national housing policy, if the Treasury or an independent regulator was established to oversee the two agencies?

Mr. DELLIBOVI. The current statutes give us the authority. I think we should be given the chance to do it. Certainly, the Department of Housing and Urban Development has the special sensitivity to the housing market that is essential, if we are to realize the goals of promoting homeownership for more Americans.

There is a housing mission that both of these agencies have, and I think it is appropriate that the regulation be with the Nation's top housing official.

Senator CRANSTON. A key concern of the subcommittee will be the degree to which we have appropriate performance standards and capital adequacy for Fannie Mae and Freddie Mac.

How have you been approaching the question of performance standards and capital standards? To what extent have you discussed this issue with the agencies, or with outside financial experts?

Mr. DELLIBOVI. Mr. Chairman, I am going to ask Mr. Weicher to answer that question. But you know, the thought just occurred to me, if I may just develop your previous question about independent regulation.

You know, and the members of this committee know very well, that independent regulation certainly did not save the S&L industry. So I am not so sure that taking the regulation outside HUD is a cure, if I may amplify that previous answer to point that out.

I will ask Mr. Weicher to talk about the capital standards.

Senator CRANSTON. Fine. And I appreciate that amplification.

Mr. WEICHER. Mr. Chairman, we are concerned, as the Under Secretary stated in his remarks, and as is discussed in more detail in his statement. We understand you to have significant concern, the Congress to have significant concern about capital adequacy for these institutions and for other GSE's.

We are in the process of identifying the information that we would like to receive from Fannie Mae and from Freddie Mac to enable us to develop independent judgment as to the capital adequacy. I think that that, the specifics of that, will be developed, will be in place, within the next few months, by the time that we present our first annual report to you.

Senator CRANSTON. In your testimony, Al, you stated that part of HUD's regulatory responsibility is to review and indicate objections to the general business strategy of Fannie Mae and Freddie Mac.

Could you give us an example of the sort of a circumstance in which you believe the general business strategy of Fannie Mae or Freddie Mac would require HUD stepping in to question or halt planned activity?

Mr. DELLIBOVI. Well, I guess it would be if they were to propose some very risky new product—which they have not, by the way; nor have we had any indication—but that would be the kind of thing. Something that brought to our attention a new line of business, or a change in the current way of doing business, that posed a clear threat to their solvency.

My experience in the 6 months that we were interim board members of Freddie Mac, and in watching the Fannie Mae operations, is that both of these corporations differ from other Government enterprises very significantly, because they are very concerned about market response to their activities, both the equity markets, who are expected to buy their shares, and the markets that buy their products.

There is a healthy concern that you do not usually see in a Government-related activity, because they are in the market every day, and they depend on that response.

But if they did something or were to propose something that we thought was risky, we would not hesitate to take action.

John, I do not know if you want to comment further.

Mr. WEICHER. There is a variety of information, Mr. Chairman, which becomes available at regular intervals on the status of the institutions. Such information as an increase in losses on the current portfolio would be something that I think any of us would be interested in understanding the reasons for, and the possible implications of it.

Changes in the match between assets and liabilities, in terms of duration, would be something we would be interested in. And I think that there is no shortage of indicators of potential problems, and we would not hesitate to ask questions about them when we saw them.

Senator CRANSTON. Thank you very much.

Senator Pressler, do you have any remarks to make at the outset?

Senator PRESSLER. Thank you.

I am moving from one committee to another this morning and trying to form a quorum to move some nominees out in another committee.

But I do have some questions that I would like to have asked. I do not know how we do it in a roundtable, I think for the record. Or, can I leave them with you to ask?

Senator CRANSTON. I will try to ask them.

Senator PRESSLER. All right, good.

Senator CRANSTON. Yes. Thank you very much.

We now turn to David Maxwell, and then to Mr. Brendsel.

David, you gave us 89 pages—please, do not read the whole thing. [Laughter.]

I want to thank you all for being so brief and succinct and direct in your answers. That has enabled us to start moving rapidly.

STATEMENT OF DAVID O. MAXWELL, CHAIRMAN AND CEO, FEDERAL NATIONAL MORTGAGE ASSOCIATION, WASHINGTON, DC

Mr. MAXWELL. Mr. Chairman, thank you very much for this opportunity to appear.

The subject is very important, needless to say, both to American homebuyers and to Fannie Mae and ~~its~~ shareholders. I will be as brief as I can, but I would like to read my statement.

In the aftermath of the thrift crisis, it is understandable that this committee and others want to reexamine the safety and stability of the Government-sponsored secondary mortgage markets. The old Federal system charged with regulating the S&L's failed in the end, because we all assumed it was working, and it was not.

We taxpayers are paying a dear price for our acceptance for many years of poor capital requirements and inadequate oversight for the S&L industry.

We welcome these hearings, and the studies Congress commissioned by the Treasury and GAO. As a private sector company chartered by Congress to carry out a vital national mission, you expect Fannie Mae to be guided by the highest standards of financial management and responsibility.

These hearings are an expression of your commitment to make certain the Government-sponsored secondary markets are working as Congress intended them to work. So your interest in whether Fannie Mae is efficiently supplying low-cost funds to the families and individuals you want to help, at no risk to taxpayers, is certainly well-founded.

Today, I would like to respond to your interest by discussing three points. No. 1, Fannie Mae has devoted the last 9 years to building a permanently sound company that will pose no risk to taxpayers now or in the future.

No. 2, while our current capital reserve will protect the Federal Government in even extreme and unlikely economic scenarios, Fannie Mae plans to continue building a large additional cushion of protection over the next two years.

No. 3, we favor and welcome effective oversight by regulatory authorities.

Fannie Mae has never been in a stronger position to fulfill the mandate Congress has given us. In 1989, our net business volume of $84 billion financed more than one million mortgages for low, moderate, and middle income families. And we did that business in such a sound way that we earned $807 million~~, paid our~~ shareholders dividends of $103 million, and plowed 87 percent of those earnings, or $704 million, right back into our capital account. Fannie Mae is a strong, stable, financially sound company that Congress and American taxpayers do not have to worry about.

Why am I so confident? Because we combine an increasingly large capital base with policies and systems that ensure our assets are of the highest quality, our portfolio well matched, and our earnings substantial and stable over a wide range of economic environments.

Many authorities outside the company, in both the public sector and the private markets, have agreed with our assessment of Fannie Mae. In its 1991 budget proposal, the Bush administration calls the risk that losses at Fannie Mae or Freddie Mac could increase the budget deficit "remote."

Now frankly, some others have questioned whether our capital account is sufficient to protect taxpayers from the risks of our business. That concern appears to be reached by the simple device of adding up the assets in our portfolio business and the off balance sheet assets of our mortgage backed securities business—which are two very different kinds of businesses—and dividing the sum into our equity capital.

This simple methodology fails to consider the different nature of our portfolio business, versus our MBS business, and consequently the differences in our risk exposure. We are not a bank or a thrift. Although our businesses do have some similarities to such primary lending institutions, we are sufficiently different that it is not appropriate to bake us together with these other institutions as part of a huge, homogeneous financial pastry that can be neatly and rigidly regulated with a cookie cutter.

The risks we face in our two businesses, which we protect against with the triad of earnings, asset quality, and capital, are unique, and far different from those of banks and thrifts. The risks are also limited.

The sole focus of our business is residential mortgage loans for lower and middle income houses and apartments, whose risks are statistically quantifiable based on historical experience, and whose losses have been historically lower than other assets in which banks and thrifts invest.

We are barred by law from participating in the wide range of more risky financial activities open to banks and thrifts. Moreover, we can match fund our mortgage assets, using techniques less readily available to banks and thrifts.

Finally, Freddie Mac and Fannie Mae are two rather large companies, located in Washington. I can tell you they receive much more intense scrutiny than the thousands of individual depository institutions bank and thrift regulators have to keep track of.

In our portfolio business, we have both interest rate and credit risk. In our MBS business, investors bear the interest rate risk. We have the credit risk in slightly more than half the $228 billion of MBS outstanding. On the remaining MBS, which we call "lender risk business," Fannie Mae has either recourse to the lender, or recourse with collateral, which makes our credit risk minimal.

It has been asserted that our implicit Federal guarantee provides incentive to seek extra returns by taking excessive risk. The argument goes: Heads, this corporation and its shareholders win; tails, the U.S. taxpayers are called upon to pay for the big mistakes. This is just, plain not true.

Fannie Mae shareholders have everything to lose by excessive risk taking. Our shareholders know there is no Federal guarantee of any kind on their investment in our common stock. That investment now stands at about $8 billion of market value, all of which they know would be wiped out if management fails to control risk.

So it is absurd to suggest they have only upside potential. They have plenty to lose, and might I say, so does management. Therefore, they, and we, have plenty of interest in managing the risks of our business.

And since Congress has wisely established Fannie Mae as a profit-motivated enterprise, whence come these complaints about the shareholders doing well? Would these folks prefer that they do badly?

The fact is, Fannie Mae is an idea that works, an idea that should never cost the taxpayers money. It never has, it never will. And our company pays taxes, some $908 million over just the last 3 years.

Now, let's look at interest rate risk, and how we manage it. Our basic policy dealing with exposure to interest rate risk is to acquire and maintain a portfolio of assets and liabilities that enables us to earn profits even when interest rates rise or fall by amounts that would cause widespread economic dislocation in the nation.

We carry out this policy by monitoring and matching the durations of our assets and liabilities, by using innovative liability instruments to protect our duration match over an increasingly wide range of interest rate environments, and by doing periodic stress tests to evaluate how well we are protecting ourselves against certain extreme circumstances.

We have recently done 5-year projections of our portfolio's performance under two highly adverse interest rate environments: First, a repeat of the 1978–82 experience, which had the highest averages and most extreme swings in interest rates in the last 100 years; and second, an increase in interest rates of 6 percentage points, or 600 basis points, over a 12-month period, with rates holding constant at these higher levels for for 4 years after that.

The interest rate averages in the second test are even higher than in the first. So in each case, we are talking about extremely bad times.

What are the results of these stress tests? In both environments, the portfolio's net interest margin remains positive in each year of the projected 5-year test period. And we continue to add to our retained earnings, not draw on them.

I can say with confidence to you today that you do not have to worry that interest rate risk is going to bring Fannie Mae crashing down on the taxpayers of America.

Now, let's turn to credit risk. Fannie Mae is in the business of developing and purchasing soundly underwritten and affordable home mortgage products designed to help home buyers keep their homes, not lose them by default. We promote and maintain sound underwriting requirements that serve as guidelines for purchasing loans from qualified lenders in standard or negotiated transactions.

We manage credit risk by monitoring in detail the performance of loans by type, by region, and by lender. We diversify our risk by buying loans from throughout the United States, thus protecting Fannie Mae from a downturn in any one region.

Using our credit quality guidelines, we are deliberate about the types of credit risks we accept, and the terms on which we accept them. We purchase and turn into securities some loans with collateral from or recourse to the lender. For other loans, we are willing to bear the primary risk of loss. In all cases, we price the risks we elect to bear much the same way an insurance company does.

We also conduct stress tests on our credit risks. And the stress tests we apply to our credit risks are extremely rigorous. For example, we require sufficient capital to enable all our portfolio and MBS loans from all States and in all years to withstand default rates based on our experience with 30-year fixed rate Texas loans made in 1981 and 1982.

These Texas loan default rates were extraordinarily high. Over 25 percent of these 1981-82 Texas loans with loan-to-value ratios over 90 percent have defaulted, while over 14 percent of the loans with LTV's between 80 and 90 percent have gone bad.

Mr. Chairman, I would like to note parenthetically that in his excellent statement my friend Leland Brendsel refers to a test that Freddie Mac uses, which he calls a "Great Depression test," and it is based on a model. Obviously, for competitive reasons we have not had access to that particular model. But from the published information that we have been able to glean about how those tests are conducted, we believe that, as to single-family loans, the Texas experience that we are applying would actually be more stringent than that test.

However, we are perfectly willing to apply that model, if we are supplied with it, and give the results to HUD or any other agency that needs them.

The amount of capital we have today is sufficient to protect us against an occurrence of losses on all of the loans currently in portfolio and MBS similar to what we experienced on these 1981-82 Texas loans. And we could, simultaneously with such credit losses, withstand a repeat of the 1978-82 interest rate experience. That is an extremely severe test, and we pass it.

We have been building our capital account vigorously. Over the past 2 years alone, we have added $1.2 billion to equity, bringing the total to about $3 billion. That does not include our loan loss reserve, which has grown steadily and now totals $463 million. Fannie Mae's capital is solid, unimpaired capital. It does not include see-through office buildings, strip shopping centers, Third World debt, or good will.

While, as I have said, it is our belief that the company's current level of capital is enough to withstand extremely severe tests of economic and market stress, we know, as prudent business managers, that we must continue to build capital to a level that provides unequivocal assurance of safety for taxpayers and our shareholders.

We are operating under a capital plan that led us to more than double capital from 1986 to today. Under that plan, we intend to add another $2 to $2.5 billion in capital by the end of 1991. We will do that through a combination of retained earnings and growth in loan loss reserve. This does not include possible addition to capital of approximately $500 million from conversion of equity warrants expiring in February 1991.

I commit Fannie Mae before this committee today to continue on this course, building to that higher level of capitalization over the next 2 years.

In combination with this commitment to Congress I make this morning, I also state our strong determination that Fannie Mae's current underwriting standards, the average loan-to-value ratios on our mortgages, our adherence to policies of prudent portfolio management, and meeting the exceptionally rigorous stress tests that I have outlined here, will continue.

We want Congress and the public to be absolutely sure that Fannie Mae will never pose a risk to the Federal Government.

As for oversight, we happen to believe that Fannie Mae has imposed standards on itself over the past decade that even the strictest regulators might not have required. We did this because we take our national mission seriously, and know that a financially unsound Fannie Mae is worthless to the people we are chartered to serve. Moreover, financial markets have shown they will reward only sound and prudent management.

Fannie Mae strongly favors effective regulation of our business. If fully exercised, we are confident that the existing regulatory authority is sufficient to monitor the financial soundness of Fannie Mae well into the future, even after the current management team is gone.

Furthermore, the prudent and profitable management strategy put in place during the 1980's is so successful that our regulators and the financial markets would never allow it to be altered at the expense of safety.

Thank you, Mr. Chairman.

Senator CRANSTON. Thank you very much for that fine and forceful statement.

[The complete prepared statement of David O. Maxwell follows:]

Statement of

DAVID O. MAXWELL

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

FANNIE MAE

Before the
SUBCOMMITTEE ON HOUSING AND URBAN AFFAIRS
of the
COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS
of the
UNITED STATES SENATE

FEBRUARY 7, 1990

Summary

Testimony of David O. Maxwell
Chairman and Chief Executive Officer
Fannie Mae
February 7, 1990

o Fannie Mae is one of the oldest GSEs, a private company with 35,000 shareholders and stock actively traded on the New York Stock Exchange. Current market capitalization is about $7 billion.

o Fannie Mae's modern history began in 1968 when Congress separated Fannie Mae and Ginnie Mae and gave Fannie Mae the responsibility to increase the availability--and decrease the cost --of non-subsidized mortgage financing. Fannie Mae does this effectively, in large quantities, in every region of the country, at all times. Nationwide, during 1989 we helped over one million families afford homes; 21 percent of the mortgages we purchased had balances of $40,000 or less.

o In addition to our standard business, Fannie Mae has established a special unit to deal with the housing affordability problems facing millions of lower-income Americans. This unit has committed over $3.5 billion to assist some 70,000 low- and moderate-income households to rent or buy quality housing they can afford.

o Fannie Mae performs its housing mission at no cost to the taxpayer; rather it is a substantial payer of federal taxes, paying over one billion dollars in income taxes over the past four years. Fannie Mae is confident that it will continue its record of financial and socially responsive success, for four reasons:

  o Sound management of its assets, with constant and careful attention to the most sophisticated techniques to reduce interest rate risk;

  o Its mortgage-backed securities business, in which it takes virtually no interest rate risk but which generates a steady stream of fee income;

  o Effective control of the credit quality of the mortgages Fannie Mae purchases and guarantees; and

  o Substantial and continuing build-up of its capital account.

o Fannie Mae has doubled its capital since 1986. It now has shareholders' equity of almost $3.0 billion--all solid, unimpaired capital. It doesn't include any see-through office buildings, strip shopping centers, Third World debt, or good will. It doesn't include Fannie Mae's loss reserves, which total almost $463 million. In 1988 and 1989, out of back-to-back record earnings of $507 million and $807 million, Fannie Mae put $1.15 billion right back into the business.

o We agree with OMB's assessment in the FY 1991 Budget that any risk presented by Fannie Mae to the government is remote; our triad of earnings, quality and capital will protect the government against a series of extremely stressful environments. We will continue to build capital. Under our program of capital growth, which we embarked on several years ago, we intend to add another $2.0 to $2.5 billion in capital by the end of 1991, through a combination of retained earnings and growth in the loss reserve.

o Fannie Mae's ability to make these additions and further insulate the government from any potential risk must not be compromised by the imposition of so-called "user fees." These fees are a thinly disguised regressive housing tax on those of modest income struggling to buy a first home. These "user fees" would trade the protection of the government against potential significant liabilities for current revenues that are, in federal budgetary terms, the equivalent of pennies.

o The appropriate method for examining Fannie Mae's capital, as well as that of the other GSEs, is to apply "stress tests" to the company's businesses in order to assess the amount of capital required to assure the government protection against loss. With our current capital, the business can withstand simultaneously a 600 basis point increase in rates in one year, followed by four years at the higher rates, and a national long-term credit debacle as severe as experienced in Texas after 1982.

o Given Fannie Mae's mission, size and relationship to the government, thorough and ongoing regulatory scrutiny is most appropriate. At the same time, any regulatory scheme, in order to allow Fannie Mae to perform its mission well, must take into account the fact that the company operates in a rapidly changing business environment and that regulatory delay and indecision can frustrate all that competent management can create.

o Fannie Mae believes that the existing regulatory system for Fannie Mae has worked well; full exercise of existing authority is sufficient to monitor the financial stability of Fannie Mae even after current management is gone. We believe that the current senior officials at HUD are capable and fully conversant with the dual goals of Fannie Mae regulation: performance of the mission and financial soundness. HUD's new Regulatory Review Board -- consisting of Under Secretary DelliBovi, as well as the Assistant Secretary for Housing-FHA Commissioner, the General Counsel, the Assistant Secretary for Policy Development and Research, the Assistant Secretary for Community Planning and Development, and the President of Ginnie Mae -- will enable the Department to focus its attention more closely not only on Fannie Mae but also on Freddie Mac. Concurrent Treasury regulation over the issuance of Fannie Mae debt and MBS adds certainty that Fannie Mae's financing activities will be consistent with those of the Treasury and other related entities.

Mr. Chairman and Members of the Subcommittee:

I am David O. Maxwell, Chairman and Chief Executive Officer of the Federal National Mortgage Association -- Fannie Mae. I am pleased to be here today as this Subcommittee launches its in-depth review of Fannie Mae and Freddie Mac, and their contributions to housing as government-sponsored enterprises (GSEs).

I am especially appreciative of the chance to continue working with this Subcommittee, which has so strongly supported Fannie Mae's participation in the National Housing Task Force and in developing legislation to carry out the Task Force recommendations. This Subcommittee has unparalleled experience and knowledge in the field of national housing policy, including the role of Fannie Mae and Freddie Mac in implementing that policy. We therefore particularly welcome this Subcommittee's interest. We want to be certain you are satisfied that Fannie Mae is performing the mission Congress chartered us to perform in a financially sound manner that poses no risk to the taxpayer.

As one of the oldest GSEs, a private company with 35,000 shareholders whose stock is actively traded on the New York Stock Exchange, we are used to and comfortable with scrutiny of our operations and finances. Following this statement is a 46-page list of the types of reports and data Fannie Mae provides to various government agencies, to investors and to the public.

Fannie Mae was created in 1938, and was the first federally chartered residential mortgage agency established to provide assistance through the secondary market. Our history as a private company really began in 1968 when Congress separated Fannie Mae and Ginnie Mae. In 1970 Congress expanded our mandate to increase the availability -- and decrease the cost -- of non-subsidized mortgage financing. Fannie Mae's ability to lower financing costs results from the efficiency we bring to the market and from continuing federal ties, which permit us to fund our operations at favorable rates. The benefit of reduced cost funding is passed on to borrowers not only because it is our mission, but also because of lively competition among Fannie Mae, Freddie Mac, and private market investors in and securitizers of mortgages.

The key aspect of our federal ties is a trade-off between the benefits those ties afford us and a requirement that we remain in one business and one business only -- housing. Whether it's "good times" or "hard times," it's the only business we have. We don't buy car loans or office building loans when rates on those loans are higher than on housing loans -- as they frequently are. We don't limit our business to the "best" housing loans in the "best" locations in the "best" years. We are in the market buying home mortgages which we, as market innovators, judge to be sound and we do so year-in and year-out, in every city and town in America. Over the last four years, more and more of these mortgages have gone to house Americans most in need, as we created and expanded the special efforts of our Office of Low- and Moderate-Income Housing.

Since becoming a private company, Fannie Mae has played a leadership role in helping the housing finance delivery system adapt to great turbulence, and emerge more resilient and more effective. During those two decades, we funded homes for nearly 9 million families, the overwhelming majority with low-, moderate-, or middle incomes.

In the decade recently ended, we led the way in helping the primary market cope with dramatic technological changes, rapid deregulation, and extreme economic conditions. We pioneered the development of the highly efficient market in adjustable-rate mortgages (ARMs) and mortgage-backed securities (MBS), and brought lower mortgage costs to the home finance system. Elsewhere in my testimony, I will refer to other major innovations we pioneered in every decade starting with the 1930s.

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) reaffirmed the importance of our mission, and provided more explicit guidance. We are to:

> Provide stability in the secondary market for home mortgages; respond appropriately to the private capital market; [and] provide ongoing assistance to the secondary market for home mortgages by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for home mortgage financing.

Fannie Mae is an idea that works. We are proud of our success in applying our corporate strength to serve as the USA's Housing Partner, reliably providing mortgage products and services that increase the availability and affordability of housing for low-, moderate-, and middle-income Americans. The benefits we provide have never cost taxpayers a penny. In fact, over just the last three years, we paid some $908 million in federal income taxes.

We have the utmost confidence that Fannie Mae will continue its record of financial and socially responsive success. In these times of heightened awareness of contingent government risks, we welcome the new studies of GSEs because we know they will validate and reaffirm our financial strength. My confidence rests on four factors:

- Sound management of our assets, with constant and careful attention to the most sophisticated techniques to reduce interest rate risk;

- Our mortgage-backed securities business, in which we take virtually no interest rate risk but which generates a steady stream of fee income;

- Effective control of the credit quality of the mortgages we purchase and guarantee; and
- Substantial and continuing build-up of our loss reserves and capital account.

I believe our capital strength merits particular emphasis, because shareholders' equity represents a critical cushion for the federal government. We have doubled equity since 1986. We now have shareholders' equity of almost $3.0 billion -- all solid, unimpaired equity. In contrast to the types of capital that have been allowed for financial institutions, this is pure tangible equity. It doesn't include any see-through office buildings, strip shopping centers, Third World debt, or good will. It doesn't include Fannie Mae's loss reserves, which total nearly $463 million. In 1988 and 1989, out of back-to-back record earnings of $507 million and $807 million, Fannie Mae put $1.15 billion -- almost 90 percent -- right back into the business.

We believe, with the Office of Management and Budget, that any risk Fannie Mae presents to the government is remote. Our strong triad of earnings, quality and capital will protect the company, and hence the government against a series of extremely stressful environments. We intend to add another $2 to $2.5 billion in capital by the end of 1991, through a combination of retained earnings and growth in the loan loss reserve. This does not include possible addition to capital of approximately $500 million through conversion of equity warrants expiring in February 1991. I commit Fannie Mae, before this Subcommittee today, to continue on this course over the next two years. I also state our strong determination to continue Fannie Mae's current underwriting standards, average loan-to-value ratio on our mortgages, and policies of prudent portfolio management.

But Fannie Mae's ability to make these additions -- and further insulate the government from any potential risk -- must not be compromised by the imposition of so-called "user fees." This Subcommittee knows full well that such fees constitute a regressive housing tax on those of modest income struggling to buy a first home. But in this time of concern about contingent government liabilities, we must also be aware that "user fees" would trade the protection of the government against potential significant liabilities for current revenues that are, in federal budgetary terms, the equivalent of pennies.

Before proceeding further, I would like to make two points about our capital that are sometimes overlooked. First, while shareholders' book equity is about $3 billion, the amount our shareholders actually have at stake is the company's market capitalization -- currently over $7 billion. That's what they stand to lose if we falter and that's what the Directors of our corporation and management work to protect. Second, we have an additional $2.3 billion of subordinated debt on our books. By the terms of that debt, it is clearly subordinated to all senior debt, including debt the Treasury is authorized to issue to Fannie Mae if we requested such assistance. Thus, the true cushion for the Treasury -- and the taxpayers -- is at least $5.3 billion. For any business, that's a lot of capital. For our business and the way we run it, we believe it means there is no chance that Fannie Mae would need taxpayer assistance outside of a financial catastrophe so great as to call into question our entire economic system.

To respond as fully as possible to the Subcommittee's oversight goal, the latter portion of this statement offers a comprehensive view of Fannie Mae's history and operations. At the outset, however, the testimony addresses two issues that recently have captured increasing prominence in policy debates: proper standards for capitalizing and supervising GSEs. I will also comment briefly on the appearance of the perennial "user fee" proposal in President Bush's fiscal year (FY) 1991 budget.

I. CAPITALIZATION OF FANNIE MAE.

The recent thrift crisis has produced considerable interest about exactly how GSEs work and whether existing GSE regulation and capital rules are the best possible with respect to accomplishing both their public mission and taxpayer protection. The Government Accounting Office (GAO) and Treasury studies of GSE risk, mandated by the FIRREA, will provide a comprehensive exploration of this issue for all the GSEs. We welcome a sophisticated, thorough examination of Fannie Mae's business and capital needs that seeks to balance the concerns raised by GSEs generally: how to supply federal sponsorship without subjecting the federal purse to risk of loss. That is the heart of the issue, and deserves ongoing debate and analysis as economic and political conditions change.

Fannie Mae has put in place a system of sophisticated risk management tools which, combined with our aggressive policy to retain substantial earnings, is designed to provide a level of capital that is ample for the risks we take. We therefore fully expect that the ongoing studies will confirm the strength of our capital base and our safeguards against undue risk.

THE APPROPRIATE WAY TO MEASURE THE ADEQUACY OF FANNIE MAE'S CAPITAL

We believe the appropriate methodology for examining Fannie Mae, as well as the other GSEs, is to apply "stress tests" to the company's businesses in order to assess the amount of capital required to assure the government protection against loss.

Similar stress tests are used by many financial institutions to assess their risks. Wall Street investment analysts that follow Fannie Mae also have constructed a number of such tests to gauge our resistance to interest rate as well as credit risk.

In the case of Fannie Mae, such stress tests must be tailored to recognize that each of the businesses we operate presents very different risks. As of December 31, 1989, Fannie Mae held $108 billion of mortgages in portfolio, and had $228 billion in guaranteed mortgage-backed securities outstanding. The mortgage-backed securities business, moreover, consists of a lender risk component and a Fannie Mae risk component. On our lender risk MBS -- which amounted to over $94.3 billion on December 31, 1989 -- the lender accepts responsibility for all credit losses, while investors bear the interest rate risk. Our role in these "lender risk" transactions (including those further backed by collateral) is basically to provide liquidity, and the risk we take is small. The major risk is that a lender may not be able to honor its obligation to us, a risk we minimize frequently by obtaining collateral to back the lender's obligations, by prudent choice of recourse business partners, and by frequent, thorough reviews of lender financial condition, and loan and servicing performance.

On our $134 billion of Fannie Mae risk MBS, *we* take the credit risk, as the name implies, although about $11 billion of those loans are loans insured by the Federal Housing Administration (FHA), or guaranteed by the Veterans Administration (VA), and therefore backed by the government. Here again, however, investors take the interest rate risk. Finally, in our $108 billion portfolio investment business, we take both credit risk and interest rate risk. Because the risks we take in these three businesses are so different, the amount of capital required to run each one safely is also different. By the same token, the type of stress test appropriate to gauge capital adequacy differs depending on the risk being assessed.

We have constructed stress tests to measure Fannie Mae's performance under different assumptions about economic conditions affecting both interest rate and credit risk for home loans. We capitalize our business to meet and survive extreme stresses. We have recently done five-year projections of our portfolio's performance under two highly adverse interest rate environments:

- first, a repeat of the 1978-1982 experience, which had the highest averages and most extreme swings in interest rates in the last 100 years; and
- second, an increase in interest rates of 6 percent over a 12-month period with rates holding constant at these higher levels for four years after that. The interest rate averages in this second test are even higher than in

the first. So, in each case we're talking about extremely bad times.

What are the results of these stress tests? In both environments, the portfolio's net interest margin remains positive in each year of the projected five-year period. And we continue to add to our retained earnings, not draw on them. I can say with confidence to you today that you don't have to worry that interest rate risk is going to bring Fannie Mae crashing down on the taxpayers of America.

The stress test Fannie Mae applies to its credit risk business is also extremely rigorous. One way to demonstrate this is to see how well the capital requirements dictated by this stress test would protect the Corporation's 30-year fixed-rate mortgages if all of this business -- from all states and in all years -- were to experience default rates as extreme as those which occurred on Fannie Mae's Texas loans that were originated during the 1981-1982 period.

It is hard to imagine a more extreme environment than the last decade in Texas. After riding an energy-led boom beginning in the mid-1970s -- during which home prices more than doubled between 1976 and 1982 -- Texas was hit first by a national recession and then by an extremely sharp regional recession. Loans made in 1981 and 1982 in Texas were on the crest of a wave. After 1982 mortgage rates fell by over 6 percent, oil prices plunged, Texas unemployment soared, and home prices cracked. And, all of this happened during a time when the national economy was undergoing a wrenching transition from double-digit inflation to price stability in the 3-4 percent range.

The table below shows the default rates that Fannie Mae has experienced to date on 30-year fixed-rate loans originated during 1981 and 1982 in Texas. Default rates on loans with loan-to-value ratios over 90 percent have exceeded 25.0 percent; more than 14.0 percent of the loans with loan-to-value ratios (LTVs) between 81 and 90 percent have defaulted, and 9.0 percent of the loans in the 76-80 percent LTV range have gone bad.

Default Experience of 1981-1982 Texas Loans

(Fannie Mae 30-year fixed-rate loans by LTV class, through 9/30/89)

Loan-to-Value	≤60	>60≤70	>70≤75	>75≤80	>80≤90	>90
Percent Defaulted	0.7%	1.9%	3.8%	9.0%	14.2%	25.4%

The capital requirements Fannie Mae places on its current book of 30-year fixed-rate business -- both MBS and portfolio -- are such that were default rates like those of its 1981-1982 loans in Texas to happen in every year and in every state, Fannie Mae would have sufficient capital and guaranty fees to withstand it. The stress requirements Fannie Mae imposes on other types of mortgage loans, such as ARMs, are even more stringent. These are very tough standards, but ones which Fannie Mae believes are appropriate in light of the Corporation's central and critical role within the mortgage finance system.

Let me emphasize that these tests are additive: we assume, contrary to all historic experience, that the country would simultaneously experience extremely high interest rates and nationwide recession. Our capitalization standards do not allow us the benefits of what we know to be true: our portfolio performs best in the low-rate environments that are most stressful for credit risk, while our MBS business does well under the high rate scenarios that stress the portfolio.

INAPPLICABILITY OF MARK-TO-MARKET ACCOUNTING TO ASSESS CAPITAL NEEDS

Market value or "mark-to-market" accounting has recently achieved as much attention as any accounting issue can, primarily because of concerns that traditional accounting was abused by thrifts to book gains and hide losses. While it is important to find ways to prohibit accounting abuses, it is also essential to understand what mark-to-market is good for and where it is useless, or misleading.

Mark-to-market accounting is not at all appropriate for assessing the capital adequacy of a going concern, for at least three reasons. First, the calculation of mark-to-market values can be very subjective, and in some cases actually misleading. Second, changes in market value have a significant random component that has nothing to do with the fundamental economic value of a firm. Third, and perhaps most compellingly, mark-to-market is not a measure of risk at all, nor does it attempt to measure a company's ability to bear risk.

The lack of standards for marking to market is a frequently overlooked but potentially large problem. The simplest manifestation of this problem is the fact that relatively few assets or liabilities of a typical financial institution are traded in the market in the exact form in which the institution holds them. Because of this, inferences, interpolations, and "bridges" must be made between the prices of marketable securities and the assets and liabilities of the financial institutions. Different companies can and do use different means of making these conversions. The second and much more serious problem is that some financial institutions' assets and liabilities do not have market prices at all. Here, the element of subjectivity is even greater, and the lack of standards and conventions for how to do mark-to-market has the potential to make mark-to-market values inaccurate or even misleading. This is a particular danger with off-balance sheet items such as Fannie Mae's $230 billion of mortgage-backed securities. Depending on the methodology chosen, one can come up with estimates of the market value of our MBS business that can be billions of dollars apart.

The second major drawback of mark-to-market accounting is that changes in market value frequently have nothing to do with the economic value of the assets being evaluated or of a firm, but rather reflect the fact that financial asset prices have a large random component to them. No less an authority than Fischer Black made the profound effects of "noise" or randomness in the securities markets the subject of his presidential address to the American Finance Association. This randomness, coupled with the high degree of volatility in financial asset prices, means that relatively large changes in a firm's market value can occur for reasons that have nothing to do with the financial condition of that firm.

Finally, it must be remembered that mark-to-market net worth is not a measure of risk at all -- it is a measure of liquidation value. Very risky firms can and sometimes do have significantly positive mark-to-market net worths. The Office of Thrift Supervision recognized this fact last year when it proposed that to measure thrift institutions' interest rate risk it would have to estimate how mark-to-market net worth was affected by changes in interest rates.

But even this is not sufficient to assess a firm's capital adequacy. Not only must you estimate how much risk a company has, you must also measure and take into account that company's ability to bear risk. In financial terms, capital adequacy is dependent on risk and return.

This is why one can never draw conclusions about a firm's financial prospects or capital adequacy from a statement like "they have zero (or negative) mark-to-market net worth". Not only are such market values subjective, not only are changes in market value frequently random, but mark-to-market net worth -- even when calculated after an assumed immediate increase or decrease in interest rates -- completely ignores a firm's earning power, which is essential to assessing the company's ability to bear risk.

The risk assessment measures Fannie Mae uses -- risk-adjusted returns and stress tests -- are far superior means of assessing capital adequacy for a going concern than the market value of equity. Risk adjusted returns and stress tests are not dependent on market prices at a single point in time, and they also add in the income side of the equation without which capital adequacy cannot be judged.

INAPPLICABILITY OF DEPOSITORY INSTITUTION CAPITAL STANDARDS

We suggest a healthy dose of skepticism about simplistic proposals to apply depository institution capital rules to Fannie Mae. Bank and thrift regulations now include capital rules setting minimum required ratios of capital to total assets ("leverage" formulas) and capital to risk-weighted assets ("risk-based capital"). These latter rules contain a set of formulas assigning risk weights to various assets. These rules were designed to accommodate the varying banking systems of the 12 countries that negotiated the agreed standards.

While the risk-based capital rules acknowledge the concept that higher credit risk requires more capital, they necessarily sacrifice subtlety and fine-tuning to the administrative needs of the regulatory system. These rules, as well as the flat ratio "leverage" rules, are designed to be used by a very broad range of institutions numbering in the many thousands to determine adequate levels of capital to insulate the FDIC insurance funds from undue risk of loss. They must assure the safety of community banks with limited portfolios operating in very small towns, as well as the giant multinational institutions. In order to make such a system effective and workable, simplicity must take precedence over giving weight to the complexity of the judgments that ought to be made. That is inevitable given the supervisory task of assuring the sound operation of some 16,000 institutions exposed to a tremendous array of operating and managerial risks, and doing so through examinations conducted perhaps every 18 months by mid-level civil servants.

Thus, the size of the regulatory constituency, and its diversity and complexity in the post-deregulation era, makes complex risk-assessment modeling and discretionary, case-by-case regulation unworkable for depository institutions. As a practical, administrative matter, somewhat simplistic bright line rules must be created and enforced inflexibly to assure fairness and integrity as well.

By contrast, each of the several GSEs can appropriately be supervised only in the light of its individually unique mission and methods of operation and business risks. Even assuming some common supervisory premises for GSEs and depository institutions, the rules for the latter are of little or no use in assessing GSE risk due to extreme differences between the two groups' basic operations and risk profiles. These differences mean that applying the depository institution capital standards to Fannie Mae would substantially overstate capital needed to avert any expense to taxpayers from its operations, and would create perverse business incentives for Fannie Mae.

One major difference between Fannie Mae and the depository institutions is the diversity of credit risk each incurs. Our credit risk is narrow because our only business is residential housing. It is a business for which extensive data bases exist to guide risk and pricing decisions. Moreover, Federal Reserve Board and Office of Thrift Supervision (OTS) data show that residential mortgages have by far the lowest default ratio among all assets of FDIC-insured institutions.

Contrast this narrow risk profile with the wide range of assets in which thrifts and commercial banks may invest. Even with the changes in the "qualified thrift lender" test made by FIRREA, a thrift may have up to 30 percent of assets in commercial and other non-housing credits of all types. These diverse assets, such as office buildings, have proven much more vulnerable than residential loans to economic shifts. Perhaps the best illustration of this risk dichotomy is the consensus among government agencies and other analysts that the FSLIC crisis was driven by the "Lone Rangers" of the industry, given carte blanche by lax supervision to gamble on a range of entrepreneurial ventures unrelated to housing. The institutions who "stuck to their knitting" by investing in residential mortgages include the largest group of solvent and profitable survivors. Diversification is in general a good risk-mitigation principle, and Fannie Mae practices it with respect to the geographic dispersion of our loans. But indiscriminate diversification out of the least risky category of loans into a variety of categories that all carry higher risk is of no benefit whatsoever.

Another key factor that greatly mitigates Fannie Mae's risk is our commitment to nationwide operation. Mortgage credit risk is largely economic risk. Generally, economic problems occur in very localized situations. Even in a national economic recession, certain sections of the country are more affected at different points in the downturn. Through broad geographic diversification, the chances of a national portfolio experiencing the same degree of default losses as an individual region or market are greatly reduced, thus helping to stabilize the long run returns of the national portfolio. With the possible exception of our chief competitor Freddie Mac, Fannie Mae's degree of geographic diversification is unmatched by any other lender in the U.S. Our ability to absorb poor loan experience in the oil patch and Alaska are two recent examples of the benefits of such diversity.

It is also true that thrift institutions with large holdings of whole mortgages or MBS are much more likely to be vulnerable to interest rate swings than Fannie Mae. Thrifts rely on volatile, short-term accounts (passbooks, NOW accounts, three-month, six-month, one-year and two-year certificates of deposit) for the bulk of their funding. Short-term liabilities do not closely match fixed-rate mortgage assets in maturity. Interest rate swaps and other hedging devices are available to achieve a better maturity match -- but these are costly, even when hedging expertise is available within the institution. Consequently, interest rate risk remains a major concern of thrift supervision today.

By contrast, Fannie Mae is able to borrow in the national and international capital markets in a "wholesale" fashion, selling large volumes of its debt instruments through capital market dealers. Because of its "agency" status in the credit markets, Fannie Mae has tremendous flexibility in obtaining funds, both across the yield curve (from maturities ranging from one month to 30 years) and across many types of instruments with characteristics tailored to our needs. This allows Fannie Mae to achieve average debt durations and maturities that are closely matched to those of its mortgage portfolio. For example, at December 31, 1989, the gap between the estimated duration of Fannie Mae's assets and the duration of its liabilities was about six months, while Fannie Mae's one year maturity gap was a positive four percent. The thrift industry as a whole in March 1989 had a negative one year maturity gap of 17 percent. Even factoring out insolvent institutions, the one year gap for thrifts was probably about a negative 15 percent.

The current depository institution rules do not recognize these critical risk reducing factors available to Fannie Mae. In fact, the bank capital rules have no provision at all for recognizing the benefits of effective interest rate risk control, or the dangers of failing to manage such risk. The thrift regulator's proposed rules did at one point contain an interest rate risk component, but this proposed rule has been widely criticized as being too complex for the routine regulatory examinations of thousands of thrifts and as not sufficiently differentiating a risky portfolio from a less risky one.

Finally, the premises and possibilities of GSE regulation differ fundamentally from regulation of depository institutions because there are only 6 GSEs or GSE systems operating today that carry out true intermediation or credit enhancement functions to specific economic sectors. Except for Fannie Mae and Freddie Mac, which are chartered for the same purpose, each of these intermediary GSEs is unique. Each has different risks, provides different benefits, serves a different sector of the economy, and operates in its own way. Each has a unique mission and charter. Rigid generic rules on capital or other prudential issues are not required in the interests of administrative expedience. Indeed such an approach would be counterproductive. It would sacrifice the ability precisely to monitor and manage risk for each GSE while accommodating the specific social goals of each entity.

For all these reasons, the bank and thrift capital rules cannot measure Fannie Mae's risks effectively. Accurately measuring the risks incurred by a GSE is vital in balancing the dual goals of GSE supervision, performance of the mission and financial stability. Any policy that requires more equity than truly needed to protect against risk can only result in upward pressures on our pricing, which lenders inevitably will pass along to home buyers in the form of higher interest rates. Such a policy would also force a reduction in the scale of our operations, just at a time when the FIRREA market reforms indicate a need for increased secondary market support to aid the Resolution Trust Corporation (RTC), and make up the shortfall as many thrifts shrink or go out of business. In short, the result would be to cripple unnecessarily one part of the housing finance system that is working splendidly, just when it is most needed.

II. OVERSIGHT OF FANNIE MAE.

Fannie Mae is subject to substantial oversight by the federal government. The Treasury must approve all the corporation's borrowing activities. The Department of Housing and Urban Development (HUD) has general regulatory and rulemaking authority over Fannie Mae. HUD monitors the corporation's operations, sets capital requirements, approves or disapproves new activities, and requires regular financial reports. Among reports required by HUD are quarterly reports regarding investors purchasing Fannie Mae securities; the loan portfolio composition and average yield of mortgages purchased; distribution of holdings of Fannie Mae stock, and lender groups from whom loans were purchased; a monthly report on commitment activity; and quarterly and annual reports detailing the company's financial condition. In addition, Fannie Mae provides HUD with other information or reports as it may request from time to time.

In addition to all of this, various arms of the government such as the General Accounting Office conduct studies of Fannie Mae. In the last four years, the General Accounting Office has made five studies of Fannie Mae and other GSEs. Further, FIRREA added a provision granting the GAO audit authority over Fannie Mae's mortgage transactions.

Finally, of course, FIRREA instructs the General Accounting Office and the Treasury to conduct major studies of Fannie Mae and other government-sponsored enterprises. The GAO studies will include assessing what type of capital standards may be appropriate for the varying GSEs, given their differing missions and modes of operation. The Treasury studies focus on potential GSE risk to the government and the impact of GSE borrowing on Treasury borrowing. The first set of studies is due this May.

From outside the federal government, Fannie Mae receives intense, ongoing scrutiny from its independent auditors (KPMG Peat Marwick) from investors in its securities and securities analysts, and from the rating agencies. Our outside auditors monitor the company throughout the year; investors in our securities engage in an almost perpetual "due diligence" review of our financial condition and earnings prospects; and Standard and Poor's and Moody's and other rating agencies periodically review our business.

Given Fannie Mae's mission, size and relationship to the government, thorough and ongoing regulatory scrutiny is most appropriate. The government has both the right and responsibility to know and understand what Fannie Mae is doing and its financial condition, so as to ensure that Fannie Mae performs the functions set forth in the Charter Act in a prudent manner -- one that is protective of the financial interests of the federal government. At the same time, any regulatory scheme, in order to encourage Fannie Mae to perform its mission well, must take into account that the company operates in a rapidly changing business environment and that regulatory delay and indecision can frustrate all that competent management can create.

Recently, some questions have been raised about the appropriate structure of regulation for Fannie Mae and other GSEs. Speaking only for Fannie Mae, I believe that the existing system -- for all its ups and downs -- has worked rather well. Competent people approaching the regulatory function from the proper perspective are the key to effective regulation. We believe that the current senior officials at HUD, including Under Secretary DelliBovi from whom you have heard, are capable and fully conversant with the dual strands of Fannie Mae regulation: performance of the mission and financial soundness. HUD's new Regulatory Review Board -- consisting of Under Secretary DelliBovi, as well as the Assistant Secretary for Housing-FHA Commissioner, the General Counsel, the Assistant Secretary for Policy Development and Research, the Assistant Secretary for Community Planning and Development, and the President of Ginnie Mae -- will enable the Department to focus its attention more closely not only on Fannie Mae but also on Freddie Mac. Concurrent Treasury regulation over the issuance of Fannie Mae debt and MBS adds certainty that Fannie Mae's financing activities will be consistent with those of the Treasury and other related entities.

In summary, Fannie Mae understands the need for and welcomes effective, thorough, ongoing regulation to make certain we perform our mission at no risk to the taxpayer. If fully exercised, we are confident the existing regulatory authority is sufficient to monitor the financial stability of Fannie Mae well into the future -- even after the current management team is gone.

III. USER FEES.

As part of the FY 1991 budget, the Administration is once again proposing to require Fannie Mae to pay a so-called "user fee" to the Treasury each year on the company's borrowings and mortgage-backed securities (MBS). The fees would phase in, ultimately resulting in a full 30 basis points (three tenths of 1 percent) charge on all debt and 15 basis points on all MBS.

I strongly urge you to reject this concept, which is nothing more than a housing tax in the guise of deficit reduction. A close look at the stated rationale for these user fees reveals glaring inconsistencies that deprive the concept of even a thin veneer of credibility. These flaws led each prior Congress to reject the user fee idea when it surfaced in the budgets for FY 1986, FY 1987, and FY 1990. Indeed, Congress even went on the record to discredit the concept in 1987, and passed a law, which

President Reagan signed, banning any user fee levy on Fannie Mae and Freddie Mac. And the committee reports accompanying both Budget Committee resolutions for fiscal year 1990 stated expressly that the resolutions did not include housing user fees.

In fact, common sense flies in the face of the budget's stated rationale for these "user" fees: to compensate the government for its support of Fannie Mae (and Freddie Mac), and to offer more insulation against contingent losses stemming from the implied guarantee of GSE obligations. A close look at the facts reveals no support for these assertions, and a lopsided equation where the costs to housing far outweigh any dubious benefits in reducing the deficit.

First, the term "user fee" is pure sophistry because we don't "use" any federal services. Taxpayers don't support Fannie Mae and have never spent a penny on our business. Fannie Mae doesn't spend federal taxes; it pays them.

The argument that user fees would compensate taxpayers for the possible risks of GSE losses is also fatuous. In fact, they would produce exactly the opposite result by draining the profits available for accumulating more capital. Fannie Mae's plan to build capital significantly over the next two years will fail if substantial amounts of our earnings vaporize as "user fees."

Recent events should serve as fair warning against assuming that these "user fees" will in any way "reimburse the taxpayer for a portion of the risk that might inhere in this special relationship," as the budget puts it. "User fees" -- even within a trust fund, let alone outside of one -- are nothing other than an excuse to raise general revenues from a special segment of the population -- in this case homebuyers and renters.

Shorn of the pretexts, it is clear that so-called "user fees" are really a very regressive tax on housing. The fees would raise mortgage rates by 30 basis points, making it even more difficult for young families to afford first homes. A 30 basis point increase in rates would reduce mortgage originations by about $10 billion annually, depriving 100,000 families of the chance to buy a home. And the fees would not affect buyers of expensive homes, but the low-, moderate- and middle-income families that benefit from our business. Fannie Mae's average mortgage purchase in 1989 was about $83,000. Twenty-one percent of the mortgages the company financed in 1989 were under $40,000.

These fees also would curb the company's special initiatives for low- and moderate-income housing. Fannie Mae participates heavily in public-private partnerships for affordable housing. In addition to its core business, the company has supported these partnerships through community lending, public finance programs and the low-income housing tax credit. It has committed $3.5 billion to these programs, helping some 70,000 families. Imposing user fees would not only increase the cost of this financing, thereby allowing us to serve fewer families, but could also force the company to cut back on this investment.

Hamstringing our operations through user fees carries with it the added costs of a rockier transition for the housing industry to a post-FIRREA environment. The uncertainty and transitional pains felt by the home finance industry in the wake of the omnibus reforms passed in August have become regular headline news. But certainly, the housing and mortgage finance industries would feel a greater impact from the S&L crisis were it not for the consistent presence and liquidity offered by Fannie Mae and Freddie Mac. It particularly makes no sense to impede the operation of these two reliable sources of housing money when they are needed even more to assure systemic stability and to assist the RTC under FIRREA.

I also want to emphasize that all the user fee proposals have disregarded a crucial aspect of our Charter: we already "pay" for the privilege of carrying out our public mission through strict limitations on our business. To so confine the company's profit horizons to implement government policy, and then to charge it for this "privilege", is tantamount to jettisoning the policy. Without government ties, no private company could support in all times and across the country the home mortgage market as Fannie Mae is chartered to do.

Finally, the paltry revenues produced by these user fees only serve to highlight the skewed cost-benefit equation inherent in the concept. While the fee would hurt thousands of families each year and remove a major component of government housing support at a time of great change, the deficit reducing effects provide almost no relief to the federal government. For 1991, the fees paid by Fannie Mae would amount to only .000025 of total receipts. Even in the out years, the projected combined fees to be raised from Fannie Mae, Freddie Mac, and Sallie Mae would amount to only .0007 of budget receipts.

IV. WHAT IS FANNIE MAE?

Fannie Mae is a privately owned corporation with a congressional mandate to support homeownership and needed rental housing through entirely self-sustaining operations. The genesis for Fannie Mae appeared in 1934 legislation responding to the Great Depression. At that time, Congress sought to develop a nationwide network of regional secondary market facilities where mortgages could readily be bought and sold. The objectives were to provide liquidity to primary mortgage lenders, encourage them to originate FHA's pioneering 30-year fully-amortizing loans, and through the purchase of loans by such facilities, give primary lenders funds to make additional loans.

To meet these goals, Congress enacted Title III of the National Housing Act of 1934; this authorized the Federal Housing Administrator to charter and supervise privately-owned, profit-making corporations to be known as "national mortgage associations." They were to buy and hold mortgages, and finance their operations by selling notes, bonds and other debt to the public.

However, private investors showed no interest in these firms as totally private entities, even after the recovery from the Depression was well underway. Congress finally repealed the chartering authority in 1948 without any private association having been created, despite the fact that the requirements for the associations had been twice liberalized by reducing capital requirements and increasing the borrowing authority.

To fill the need left unmet by fully private secondary market entities, the Federal Housing Administrator in 1938 created Fannie Mae as a subsidiary of the Reconstruction Finance Corporation to purchase mortgages insured by the recently formed Federal Housing Administration (FHA), and to overcome the reluctance of lenders to participate in the FHA program. Thus, Fannie Mae came into existence because the private sector had proven itself unable or unwilling to assume the role of a reliable secondary mortgage market maker. In 1954, Congress restructured Fannie Mae as a mixed-ownership (part government, part private) corporation. From 1954 to 1968, Fannie Mae made "payments in lieu of taxes" on profits from its private secondary market operations. Fannie Mae completed the transition to total private ownership in 1968, paying the Treasury $216 million for its interest.

Fannie Mae's 239 million shares of stock are actively traded on the New York and other stock exchanges. Fannie Mae stock is one of the most actively traded and best known equities on the NYSE, with daily trading volume averaging over 1.4 million shares. Our shareholders' investment plus the retained earnings of the business provide the primary capital underlying Fannie Mae's activities. Our equity capital of almost $3.0 billion is held entirely in private hands. Our current market capitalization is over $7 billion.

Throughout its history, Fannie Mae's basic congressional mandate has been to offer assistance, liquidity and stability to the home mortgage market using private capital. While we started in the business of buying only FHA mortgages, our mission has steadily expanded to include VA and, in 1970, conventional mortgages which we began buying in 1972.

With this mission, and the efficiencies created by Congress in our GSE structure, Fannie Mae occupies a pivotal position in the home finance delivery system. We are the nation's largest mortgage portfolio investor, and our portfolio and mortgage-backed securities finance about one out of every seven mortgages in the United States. In 1989, our net new business volume of $84 billion helped more than 1,000,000 families afford homes. About 21 percent of the mortgages we purchased had balances of $40,000 or less and the average mortgage purchased was about $83,000.

As its federal charter mandates, Fannie Mae operates only in the secondary market in home mortgages for single- and multifamily loans. Our commitment specifically includes support for low- and moderate-income housing. The charter limits the size of loans Fannie Mae can buy. Working within these boundaries, we purchase mortgages from housing lenders to resupply them with funds to lend people to buy homes and to build and rehabilitate rental properties.

To offset these statutory restrictions, indeed to enable Fannie Mae to carry out its mission for housing, the government maintains certain ties with the company that allow us to borrow at reduced cost. Fannie Mae passes these cost savings on to lenders and consumers in the form of lower interest rates on mortgages eligible for purchase by it. We also help Americans who need housing through our special, often innovative, initiatives to serve the housing credit needs of low- and moderate-income households.

In 1982, when the housing markets desperately needed liquidity, Fannie Mae purchased one out of every seven home mortgage loans originated. And after 1986, when many other investors fled from the energy belt, Fannie Mae stayed in that market. We also have initiated a broad loan modification program in the oil patch states and Alaska to help thousands of people stay in their homes, and helped finance counseling services for unemployed and underemployed families in danger of losing their homes through foreclosures.

Congress initially authorized the creation of Fannie Mae in the 1930s, rechartered it in 1968 with continuing government ties, and recognized its expanded role in 1989, precisely because the private markets had not been able to provide a steady supply of funds to housing. As the nation's largest investor in mortgages, Fannie Mae provides a degree of efficiency, liquidity, and reliability that simply cannot be matched by private investors.

Today, the nation's housing system needs Fannie Mae just as much as, or even more than, when Fannie Mae was created in the wake of the Depression. Two important developments dictate that need: deregulation and the close intertwining of the mortgage and capital markets. Our business assures depositories, which remain the primary delivery vehicle for financing homeownership, a reliable supply of affordable mortgage credit financing, when their deregulated deposit base will not support their mortgage demand.

Fannie Mae's activities also enable home buyers, especially first-time buyers and families of moderate means, to compete for mortgage money with corporations and other large users of capital. This mission is more vital today than ever before because the mortgage and capital markets are now so closely linked. That linkage makes it possible to draw on a huge reservoir of capital quickly. This makes possible a more efficient, more reliable flow of residential credit capable of supporting a more efficient residential building industry better able to serve housing consumers at lower cost.

The linking of the capital and housing finance markets, however, carries with it a threat of volatility in the form of highly volatile interest rates, and potential disruption in the flow of credit to housing, for two reasons. First, the linkage is based on technologies that enable lenders to collect, retrieve, analyze and disseminate large quantities of data with speed unthinkable only a few years ago. That ability can work to shut off, as well as to increase, the flow of credit and to do so frequently and on a large scale as lenders who are continents and oceans apart react at the same time to the same data appearing on their screens. As large, active, fully informed participants in the capital markets, with agency status, Fannie Mae and Freddie Mac can act quickly to counteract and mitigate potential flows of funds away from housing.

Second, housing has always been and remains peculiarly vulnerable to shifts in the availability of credit -- whether local, national or global. This is so because it is the most interest sensitive of all consumer goods. No other consumer necessity is as large, complex, expensive, long-lasting, and immovable as a home. Producers of housing, even relatively large ones, cannot hope to exercise unaided the kind of economic power to command credit that other major industries, such as the oil and auto industries, take for granted. Further, because a home is generally the most expensive of all consumer goods, it must be financed with what is for most families their largest and longest-lasting single indebtedness. Sudden increases in financing cost are thus especially disruptive to the demand for, and the efficient steady production of homes, thereby adding to their cost. Also, because homes tend to be virtually immovable, an over-supply and loss of value in one locality cannot be remedied by the existence of an under-supply in another locality. Fannie Mae and Freddie Mac overcame these limitations by giving investors, worldwide, an opportunity to provide funds for housing through safe, easily understood, homogeneous investment vehicles.

Since Fannie Mae and Freddie Mac were created, much has changed for the better in the residential building, lending and real estate industries. Yet, housing still remains more vulnerable -- as your Subcommittee's hearings have often documented -- than other consumer necessities to changes in credit markets and in the economy as a whole. It remains the mission of Fannie Mae and Freddie Mac, as federally sponsored, national, specialized residential credit agencies to help channel credit to the advantage of housing consumers and to prevent serious disruptions in the flow of credit either nationally or in regions or localities.

HOW FANNIE MAE OPERATES

In meeting its charter mandate, Fannie Mae operates two types of businesses: (1) buying mortgages and placing them in our own investment portfolio, and (2) packaging home mortgages into securities that are sold to investors. As of December 31, 1989, Fannie Mae's net portfolio investments totalled nearly $108 billion, and outstanding mortgage-backed securities were $228 billion. Fannie Mae funds its mortgage portfolio purchases through borrowing in the agency debt market, and has access to funds priced close to the Treasury yield curve across a range of maturities. Our mortgage activities are "wholesale"--we do not take or process loan applications, but instead purchase mortgages lenders have underwritten using our credit guidelines.

During the first 13 years of its existence as a private corporation, Fannie Mae provided liquidity to the mortgage market entirely by purchasing mortgages for its own portfolio. Fannie Mae initiated a mortgage-backed securities program in 1981 as part of a comprehensive management plan to insulate the company from interest rate variations.

Nevertheless, the portfolio still plays an essential role in allowing lenders to experiment and develop innovative products which ultimately help to make housing markets more efficient and to broaden home ownership. Innovative classes of mortgages are, until tested by experience and in the market in sufficient numbers, not normally suitable for inclusion in packages offered to investors as backing for bond-tvpe securities. By purchasing such mortgages for investment, Fannie Mae provides lenders with the opportunity for full testing and development of such mortgages. The "graduates" from our portfolio to our securities program include not only ARMs, but also multifamily loans.

In the years since 1981, Fannie Mae has developed and put into place advanced technology and sophisticated risk management systems to stabilize the portfolio's income potential in the face of rising, falling and volatile interest rates. As a result, the portfolio today is an important source of profitability that also promotes stability and liquidity in the mortgage markets. The portfolio is especially important in providing funding for housing during periods of volatile interest rates, when the liquidity of mortgage-backed securities may be reduced.

Fannie Mae's mortgage-backed securities encompass a broad range of products designed to meet the needs of different investors, and include mortgage pass-through securities, and the newer Real Estate Mortgage Investment Conduit securities (REMICs). Fannie Mae earns guarantee fees for its role in creating and guaranteeing the timely payment of principal and interest to investors in mortgage-backed securities. Fannie Mae earns this fee as long as the security is outstanding.

By guaranteeing the timely payment of principal and interest on its mortgage-backed securities, Fannie Mae relieves mortgage-backed securities buyers of the risk that borrowers on the underlying mortgages will default or will make payments late. The MBS structure also relieves them of the need to know the specific characteristics of the underlying mortgages. As a result, investors enjoy in mortgage-backed securities a homogeneous and easily-traded investment.

FANNIE MAE'S STRUCTURE AS A PRIVATE COMPANY WITH A PUBLIC PURPOSE UNDERPINS THE EFFECTIVENESS OF ITS MISSION

Congress designed Fannie Mae's continuing government ties to make certain that the company could carry out its special mission of assuring a ready supply of affordable mortgage credit. These federal ties have been critical in developing a healthy active nationwide system linking the capital markets to local mortgage markets. The ingredients of the federal relationship -- which are shared in whole or in part by the other GSEs to be studied under FIRREA -- support the capital market's assigning of so-called "agency" status to Fannie Mae securities.

The major rating agencies (Moody's and Standard and Poor's) and investors believe these factors create an **implied** federal guarantee on Fannie Mae's senior debt securities and MBS, although not on the company's stock. This in turn gives Fannie Mae access to the capital markets to borrow at lower rates and in greater quantities than non-agency borrowers.

Because Fannie Mae passes along its pricing efficiencies to mortgage lenders and borrowers, consumers benefit from more affordable mortgage rates. Many analysts have estimated that mortgage rates are lower by one-third to one-half of a percent because of our presence in the market. This is easily confirmed by examining the mortgage interest rate table in The Washington Post Saturday real estate section. The Post uses our statutory "loan limit" as a demarcation category in quoting rates and their rate table typically quotes loans over our statutory "loan limit" (nonconforming loans) at rates up to a half percent above those within the ceiling. At the same time, the company's private ownership creates a management imperative to earn a competitive return for the shareholders, by funding housing in a businesslike manner. This private discipline, honed by competition with Freddie Mac and other investors, in turn creates an efficient engine that produces a steady supply of affordable mortgage funds.

V. FANNIE MAE'S BENEFITS FOR HOUSING FINANCE.

Fannie Mae acts as a national intermediary between the demand for funds in the mortgage credit markets and the supply of funds in the domestic and international capital markets. This national intermediary function enables the company to provide many unique benefits to the housing and home finance industries.

Private companies without Fannie Mae's special ties to the government also operate in the secondary mortgage market. But

Fannie Mae affords benefits to the homebuyers and the housing sector that flow directly from various aspects of our federal ties and "GSE" status. Our low-cost funding, nationwide high volume operation, and our permanent housing commitment create a synergy that substantially enhances the vitality of the housing sector and the overall economy in which housing plays a key role. Because Fannie Mae can offer multifaceted support to national housing policy -- from supporting community reinvestment goals to assisting the Resolution Trust Corporation minimize losses from its caseload -- it is integral to the strength and resilience of home finance delivery. Some specific benefits offered by Fannie Mae are detailed below.

1. Providing a Consistent Source of Support for Mortgage Finance. Because of its dedication to home finance, Fannie Mae supports mortgage lending in all economic circumstances and across all areas of the country. For example, Fannie Mae purchased one out of every seven mortgages written during the 1981-1982 recession. This helped many mortgage lenders and builders survive and provided a continuing source of funds for home buyers.

Again in 1986, when the "energy belt" experienced a severe downturn, Fannie Mae remained in the market. Similarly, Fannie Mae remained in the mortgage market during the spring of 1987 when mortgage interest rates rose 150 basis points in six weeks. Many other private companies that do not share Fannie Mae's statutory obligation to housing withdrew operations during that volatile period, choosing to wait for markets to calm down.

Fannie Mae also remained a stable market presence during temporary but more violent market dislocations, such as the days immediately preceding the stock market crash of October, 1987.

2. Tapping Added Capital for Housing. To fund its portfolio investments, Fannie Mae raises capital that would not otherwise be invested in housing. We can do so because our short-, intermediate-, and long-term agency debt securities are attractive to investors that have neither the desire nor the inclination to invest directly in mortgages or MBS, because of default risk, administrative complexity, prepayment risk, and principal cash flows during the security's term. Banks and thrifts that have traditionally acted as the primary home finance intermediaries tap only shorter term capital resources.

Fannie Mae also can supplement its domestic borrowings with long term funds from the broader international capital markets that historically have not invested in housing. For years, Fannie Mae has attracted offshore funds for housing, as demonstrated by strong demand from foreign investors for our debentures. Our successful efforts to structure securities for overseas investors and to familiarize them with Fannie Mae has enabled us to lower our borrowing costs and pass the savings along to American homeowners. As much as 25 percent of Fannie Mae debentures sold in 1989 were bought by overseas investors. Access to foreign sources increases the supply, and decreases the cost of funds to support housing. While Fannie Mae is not dependent on these funds, in recent years, foreign investors have bought between 10 percent and 25 percent of our debentures.

Fannie Mae MBS transform an array of illiquid mortgage instruments gathered from lenders from across the nation into highly liquid, homogeneous securities with guaranteed timely payments of principal and interest. Through MBS, Fannie Mae has encouraged broader acceptance of mortgages as investments by financial institutions, corporations, and fiduciaries. Fannie Mae also has introduced innovative securities and features tailored to meet the needs of a broader range of investors. For example, Fannie Mae has been extremely active in nurturing a market for conventional REMIC securities. In contrast to the single-class, traditional "pass-through" MBS (under which principal repayments were unpredictable), the REMIC vehicle permits an issuer to offer a mortgage-backed security with a range of specified yields and more certain average lives ranging from 2 to 20 years. This variation broadens the investor base by providing an element of predictability as to principal repayments and yields similar to the "call protection" provided by non-callable corporate bonds. This is not possible with a single-class security pegged to collateral with 30 year amortization with respect to which the borrower has the right to prepay at will.

3. Promoting Systemic Stability. The national scope of Fannie Mae's operations enhances the flow of mortgage funds among geographic regions of the country; and as a major supplier of mortgage funds, dedicated to staying in the market at all times, Fannie Mae lends stability to all players in the housing finance system.

Perhaps the most dramatic example of this effect was Fannie Mae's pivotal role in retooling the home finance delivery system to perform smoothly and more efficiently in the very volatile post-deregulation era. Through its leadership in nurturing the MBS securities market in the the early part of this decade, along with the efforts of Ginnie Mae and Freddie Mac, Fannie Mae provided the means for lenders and borrowers to access a steady supply of funds for home finance despite unprecedented upheaval in the economy and the financial markets.

Implementation of FIRREA also places a premium on Fannie Mae's secondary market support, because its provisions are likely to encourage substantial sales of whole loans and mortgage-backed securities by thrifts, thrift acquirers and the RTC for some time to come. This will result from the RTC's mandate to resolve the cases of hundreds of insolvent institutions under FIRREA, as well as many thrifts' need to shrink to meet the FIRREA's tougher capital standards. Estimates of sales likely to hit the market in the next few years indicate tremendous volume. For example, recent testimony by the Resolution Trust Corporation before the

House Banking Committee estimated that $336 billion of thrift assets eventually will be placed in conservatorship.

Fannie Mae already has established a special working group to assist the RTC in disposing of the huge anticipated volume of mortgage assets from failed thrifts, and they are studying a variety of standard and innovative services we could offer. Our ability to invest profitably in high quality but nonstandard products unattractive to other investors could significantly increase the speed of the RTC's asset sales.

Approximately $69 billion of single-family loans is held by thrifts with less than 0 percent core capital. This includes approximately $29 billion of single-family loans in the RTC controlled institutions. Thrifts with core capital less than 0 percent also hold approximately $36 billion worth of MBS. Another $95 billion worth of single-family loans are held by institutions with 0 to 3 percent core capital. These institutions also hold approximately $69 billion worth of MBS.

The firms that hold these mortgage loans and mortgage securities are the most likely either to be placed in conservatorship or to sell securities or loans as a means to raise that capital, by slimming their balance sheets. For the most part, that will entail selling mortgages and MBS into the secondary market, which can produce capital and reduce the asset level against which capital ratios are calculated.

These considerations can only result in multiple market adjustments, some immense and others more subtle. This is precisely the sort of scenario in which Fannie Mae is crucial to help smooth the transition and absorb some of the excess.

4. Reducing Mortgage Interest Rates. Fannie Mae helps reduce mortgage interest rates. This results from both its federal ties and the way it does business. The federal relationship allows Fannie Mae to borrow significant amounts of money along the yield curve at rates between 25 and 75 basis points above those on comparable Treasury securities. Similarly, Fannie Mae's federal ties lead investors to accept its guaranteed mortgage-backed securities at relatively low yields, and result in lower costs to lenders of packaging a pool of loans. These savings result in lower rates for home buyers.

Fannie Mae's ability to fund mortgages through the MBS and portfolio eliminates pricing inefficiencies related to varying property characteristics and terms in the mortgage instrument. Fannie Mae is a market maker, offering to buy loans that meet our basic underwriting standards at uniform prices. For example, we do not discriminate because of geographic location.

Fannie Mae's mandate to operate a nationwide market only in residential finance also contributes to lower rates. The large volume of securities offered by Fannie Mae helps assure their liquidity, thereby decreasing the yield that investors require and keeping rates down.

5. Fostering Innovation in Mortgages and in Financial Instruments. Fannie Mae fosters innovation in the design of mortgages and financial instruments. Primary mortgage lenders are usually unwilling to originate new and innovative types of mortgages if they are uncertain they will be able to sell these loans to secondary market investors -- at least until the innovation has proven effective. Over the past 50 years, Fannie Mae has encouraged such innovation repeatedly by purchasing newly developed mortgages in the secondary market. For example:

- 1930s - Fannie Mae established the first secondary market for the untested, high loan-to-value ratio, constant payment FHA long-term mortgage.

- 1940s - Fannie Mae was able to provide a quick infusion of housing capital for the unprecedented no down payment VA mortgage.

- 1950s - Fannie Mae pioneered as the first institutional investor to purchase FHA-insured Section 221 mortgages, co-op mortgages, mortgages on manufactured home sites, mortgages on housing for the elderly and nursing home mortgages.

- 1960s and 1970s - Fannie Mae actively purchased Section 235 and 236 subsidized mortgages for low- and moderate-income households.

- 1970s - Fannie Mae and Freddie Mac provided product leadership by standardizing mortgage instruments and establishing nationally accepted property and credit underwriting standards for conventional mortgages.

- 1974 - Fannie Mae pioneered in providing a secondary market for mortgages on condominiums and planned-unit-developments.

- 1981 and 1982 - Fannie Mae helped establish a national secondary market for ARMs and second mortgages, buying over 120 types of adjustable-rate loans to help home buyers when the housing market suffered its most severe recession since World War II.

- 1987 - Fannie Mae started to purchase ARMs convertible to fixed-rate loans after a year, and started to allow lenders to submit as little as $250,000 in mortgages into an MBS pool with other lenders' mortgages ("Fannie Majors"). This permits smaller lenders to participate profitably in the MBS market.

- 1988 - Fannie Mae started to purchase biweekly mortgages, one-year cost of funds ARMS, and ARM Megapools (permitting lenders to pool ARMS with more than one adjustment date into a single security). We also started Delegated Underwriting and Servicing for certain multifamily loans.

- 1989 - Fannie Mae introduced a new type of loan, called the seven-year balloon with extendable option, to help make fixed-rate loans more affordable. With this product, lenders can offer borrowers the option to extend the balloon at maturity for a total of 30 years. Borrowers need not requalify if certain conditions are met.

6. Standardizing Mortgage Instruments and Practices. Since the early 1970s when Fannie Mae received charter authority to purchase, sell and service conventional mortgages, it has played a key role in setting and promoting nationwide industry standards for mortgage documents and practices. The most notable result is the standardization of the conventional mortgage, deed of trust and note forms. Fannie Mae, in cooperation with Freddie Mac, developed uniform single-family and multifamily conventional mortgage documents (for fixed-rate, adjustable-rate, and second mortgages) for each of the 50 states and the District of Columbia. These uniform mortgage documents are now the industry standard for primary market lenders, whether the mortgages are originated for sale into the secondary market or for retention in portfolio. They provide home buyers and investors the assurance of knowing they are using fair and tested documents.

During the 1970s Fannie Mae also established conventional mortgage underwriting standards -- for both property and borrower credit -- that we continually update and modernize. These also have become nationwide industry standards. Fannie Mae led in developing underwriting criteria that implemented both the letter and spirit of anti-discrimination, anti-redlining, and equal housing opportunity laws for conventional home financing. Fannie Mae also responded to the growth of the condominium and Planned Unit Development (PUD) market in the 1970s by establishing property and homeowner association criteria that have become the industry standard for builders, developers and other institutional investors in the secondary mortgage market.

7. Providing Support for Primary Lenders. Fannie Mae provides an important tool for mortgage lenders (mortgage bankers, savings and loan associations, and commercial banks) to conduct their businesses. For example, Fannie Mae played a key role in helping thrift institutions restructure their balance sheets during the past several years. In 1986 alone, one-third of the $50 billion in mortgage-backed securities issued by Fannie Mae to lenders were used for restructuring. Fannie Mae also provides an assured market for those types of mortgages that depository institutions choose not to hold in their portfolios, such as the long-term fixed-rate mortgages that consumers demanded in record volumes in 1986 and again wanted in 1989. Fannie Mae helps small- and

medium-sized thrifts gain access to the secondary mortgage market -- enabling them to compete with larger institutions. One-half of the thrifts that Fannie Mae serves have assets of less than $500 million.

8. Serving Low- and Moderate-Income Home Buyers and Renters. Our basic business helps make housing more affordable for a wide range of low-, moderate-, and middle-income families. Twenty-one percent of the mortgages Fannie Mae purchased in 1989 were under $40,000; the average mortgage purchased was about $83,000.

Beyond its overall purchase activities, Fannie Mae throughout its history has focused on low- and moderate-income families. For example, the same 1968 law that authorized the transition of Fannie Mae to fully private ownership and management also authorized the Section 235 subsidy program for home ownership and the Section 236 subsidy program for rental housing. These two new subsidy programs, plus the public housing program, were intended to assist in meeting the low-income component of the 10-year housing goal established in the 1968 Act.

In the early years of the new housing subsidy programs, private lenders were reluctant to originate and hold these mortgages. Accordingly, to support public policy and the new programs, Fannie Mae agreed to create a secondary market for these loans. Fannie Mae bought those mortgages when many others would not, thereby making it possible for the two subsidy programs to get under way much more rapidly than otherwise would have been possible. Through 1977, Fannie Mae purchased 65 percent of all Section 236 mortgages and 46 percent of all Section 235 mortgages. By the time the Section 235 and 236 programs were eliminated, Fannie Mae had committed to purchase 98 percent of the Section 236 and 59 percent of the Section 235 mortgages approved by FHA.

Most recently, Fannie Mae in 1987 established a special unit to focus and enhance its efforts to deal with the housing affordability problems facing millions of lower-income Americans. This unit has committed to provide over $3.5 billion in specialized financings to assist some 70,000 low- and moderate-income households to rent or buy quality housing they can afford. I have provided each member of the Subcommittee a copy of a report describing our low- and moderate-income housing initiatives in more detail, but let me summarize them here.

The Office of Low- and Moderate-Income Housing is charged with targeting products and services to benefit lower-income households, while still earning the company a reasonable return on its investment. We consciously chose to subject the Office to the discipline of the bottom line for two reasons. First, we wanted to send a clear signal to our lenders -- as well as to public agencies, nonprofit organizations, and community groups -- that lending for lower-income home buyers could be good business. Second, we did not want to place any artificial limit on our financial commitment in this area.

We actively market our low- and moderate-income lending products. Staff of our Washington-based Office of Low- and Moderate-Income Housing are supplemented by low- and moderate-income housing coordinators in each of our regional offices whose sole job is to expand these efforts. We have developed an array of marketing materials targeted to a variety of public, non-profit or profit-oriented entities, and distributed them widely to lenders, developers, public officials, and community groups. Representatives of Fannie Mae's Office of Low- and Moderate-Income Housing routinely participate in community lending conferences throughout the country -- including conferences sponsored by the regional Federal Reserve Banks and Federal Home Loan Banks to encourage financial institutions to increase their community investment activities.

Fannie Mae's low- and moderate-income housing initiatives span a wide range of programs. Virtually all involve public-private partnerships.

A. Community Lending. We offer several specifically designed community lending approaches to help finance the purchase of homes by low- and moderate-income families or the development of rental housing affordable to such households.

-- Homeownership Products. Our single-family community lending helps lenders who have community reinvestment goals and borrowers who have few, if any, other means of homeownership. Fannie Mae works with lenders, mortgage insurers, public agencies, and nonprofit organizations to design housing partnerships for lower-income home buyers.

Generally, the affordability models include a five percent cash down payment by the borrower and the purchase or securitization of a market-rate first mortgage by Fannie Mae. Fannie Mae can also support below-market rate mortgages by using its mortgage-backed securities. To enhance affordability, Fannie Mae allows unsecured financing of closing costs and subsidized second mortgages for community lending loans. The second mortgages may be provided by a state or local government, or by a nonprofit organization. Nonprofit groups often play a role in developing housing, in providing prepurchase counseling, and in helping to identify potential home buyers.

Community lending can take several forms:

o In Miami, Florida, we are working with a consortium of local lenders and the Homes for South Florida -- a nonprofit organization of business and community lenders -- to finance homeownership for Dade County's lower-income families. Secondary financing is being provided through Dade County's Documentary Surtax Program. The Local Initiatives Support Corporation and a local affiliate of The Enterprise Foundation are also involved.

- Fannie Mae is working with two mortgage insurers -- The General Electric Mortgage Insurance Companies and the Mortgage Guaranty Insurance Company in many cities nationwide. GEMICO and MGIC are providing insurance for low down payment mortgages, which Fannie Mae will purchase from a large network of participating lenders. Under these initiatives, low- and moderate-income home buyers will benefit from lower cash requirements for loan closing, higher borrower-qualification ratios, and nontraditional methods for establishing creditworthiness. These efforts expand upon a demonstration developed in partnership with the nonprofit National Training and Information Center based in Chicago.

- Fannie Mae participates in short-term lease-purchase arrangements that permit nonprofit organizations or public agencies to purchase and rehabilitate properties that are made available to lower-income tenants/purchasers. During the lease term, the nonprofit or public agency owner works with the tenants/purchasers so that they are capable of assuming the mortgage at the end of the lease. Fannie Mae purchases the first mortgage when rehabilitation is complete. Such arrangements are operating on a pilot basis in Cleveland and a number of other communities. We are eager to expand on them.

As of December 1989, Fannie Mae had made commitments to purchase approximately $900 million in mortgages under single-family community lending initiatives that will serve some 15,000 households throughout the country.

-- Multifamily Community Lending. On a case-by-case basis, Fannie Mae purchases mortgages on multifamily rental projects serving principally low- and moderate-income families. These projects often involve participation by a state or local government or a nonprofit organization. These participants provide subsidies necessary to ensure that the housing is available to lower-income renters, and to ensure that the project is consistent with locally defined public purposes. Their support generally is in the form of a subordinated below-market interest rate loan.

In a number of instances we have undertaken multifamily community lending agreements to focus our efforts on particular markets. For example, Fannie Mae has entered into an agreement with the Low-Income Housing Fund -- a nonprofit organization based in San Francisco -- to purchase up to $15 million in mortgages on rental properties serving lower-income families and individuals. The first loan we bought under this agreement is helping to finance the renovation of a structure in the Tenderloin district of San Francisco to provide 105 units of housing.

Last October, Fannie Mae announced an agreement with the Mortgage Bankers Association of America to finance up to $100 million in mortgages on low- and moderate-income multifamily properties in five communities that will be selected shortly. In late January, we also announced that we would be joining with the National Association of Home Builders to jointly design and implement pilot projects for low- and moderate-income families in five cities.

B. Low-Income Rental Housing Equity Investments. From 1986 when the Congress authorized a program of tax credits for investments in qualified low-income rental housing projects, through December 1989, Fannie Mae has made commitments to invest more than $125 million in qualifying projects to help develop more than 7,000 badly needed units of rental housing.

We have made a special effort to support nonprofit housing developers, to target difficult-to-serve markets, and to assist families with particularly pressing housing needs. More than 30 of the projects in which we are investing involve nonprofit housing development groups, either acting alone or participating with for-profit developers. A large share of our investments are located in communities that pose special development challenges. Four of our projects involve the development of single-room-occupancy facilities to provide permanent housing for formerly homeless individuals -- often in conjunction with on-site social services. Five projects are expected to be occupied primarily by elderly families and individuals.

A few examples illustrate the wide variety of circumstances to which the tax credit can be applied:

o In New York City Fannie Mae has committed to invest more than $35 million to finance the rehabilitation of up to 1,000 units of abandoned city-owned housing. The projects -- located in Harlem, Brooklyn, the Bronx, and the Lower East Side of Manhattan -- are being developed by 18 different community groups. For several groups, these represent their first ventures into the development of permanent housing. A subsidiary of The Enterprise Foundation identified individual projects and helped structure the transactions. The City of New York sold the properties for $1 each, and New York City and State each provided very-low-interest mortgages. A number of these projects are targeted specifically to families now living in welfare hotels. Other projects are part of broader community redevelopment efforts.

o We have a similar arrangement with Rural Housing Services -- an affiliate of the Housing Assistance Council -- to invest in projects located in rural areas. Thus far, we have closed four transactions, in Alabama, Florida, North Carolina, and upstate New York. Additional investment opportunities have been identified in a number of other states.

o In Chicago, we have committed to invest more than $8 million to finance the rehabilitation and construction of 178 apartments in Humboldt Park/West Town. The project is the product of a joint effort between the Bickerdike Redevelopment Corporation -- a nonprofit community group -- and two private developers. The City of Chicago is helping to fund this major community improvement.

- In Highland Park, Michigan, Fannie Mae has committed to invest nearly $3.8 million to help convert the abandoned Highland Park Hospital into 210 units of housing for low-income elderly residents. Financing for this project, which has transformed an eyesore into a community asset, is being provided by the Michigan State Housing Development Authority and by the City of Highland Park.

Going forward, Fannie Mae is especially interested in helping to finance projects identified by localities as serving particularly pressing housing needs. In addition, we are making an effort to encourage other corporations to join us in tax credit investments.

C. Public Finance Initiatives. Fannie Mae purchases tax-exempt mortgage revenue bonds issued by state and local housing agencies. The bonds support mortgages for first-time home buyers and other low- and moderate-income households. By purchasing entire agency issues, Fannie Mae reduces the agencies' issuance costs, allowing them to offer lower cost mortgages than otherwise would be possible. Thus far, we have bought some $2.3 billion in MRBs, helping to finance mortgages for an estimated 37,000 families of low- and moderate-income, with the great majority being first time homebuyers. In a number of instances, we have worked with housing agencies to target a share of the funds to lower-income families -- those with incomes equal to or less than 80 percent of the area median -- at an even lower interest rate. Overall, some 300 lenders have participated in this public finance initiative -- originating mortgages with funds from bonds that we have purchased.

Fannie Mae also provides credit enhancement for single-family and multifamily housing bonds, by issuing mortgage-backed securities or pledging collateral from our mortgage portfolio to guarantee the timely payment of principal and interest on the bonds. Our guarantee helps to reduce the agencies' borrowing costs, and these savings are passed on to the home buyer or renter. Under this initiative, Fannie Mae recently entered into agreements with the state housing finance agencies of Massachusetts and Florida to provide credit enhancement for up to $250 million in bonds that will be used to finance rental housing projects for low- and moderate-income families.

In a different type of transaction, Fannie Mae recently entered into a partnership with the Vermont Housing Finance Agency to make possible the sale into the secondary market of $100 million in nonstandard single-family mortgages by 20 Vermont lenders. As part of the transaction, the state agency is requiring that participating lenders reinvest at least 50 percent of the sale proceeds in debt or equity investments to support additional affordable housing. We are interested in replicating this model elsewhere.

Another venture which dovetailed well with a specific federal assistance program for multifamily housing is our credit enhancement for "advance refunding" for over $90 million of tax-exempt bonds originally issued to finance the construction and/or rehabilitation of residential rental projects assisted through Section 8 rental subsidy payments; the loans are insured under Section 221 of the National Housing Act. Fannie Mae's credit enhancement allowed a sale of the refunding bonds at the lowest possible market rate, and permitted a substantial reduction in the amount of Section 8 rental subsidies provided to the projects by HUD, allowing HUD subsidy dollars to benefit additional families.

VI. THE SPECIAL BENEFITS TO HOUSING OF FANNIE MAE'S PORTFOLIO.

Fannie Mae's flexibility as a portfolio lender as well as an MBS insurer is crucial to its public mission.

First, the portfolio function permits Fannie Mae to offer counter cylical support to smooth out the stresses and strains on the primary market. Fannie Mae's overall market share and portfolio purchases increased markedly to address tight credit in 1950, 1957, 1959, 1969, 1973-1974, and 1981-1982. Fannie Mae's unique structure allowed it to continue borrowing in the capital markets and to buy mortgages during these tight credit periods. By contrast with regulated depositories in the primary market, Fannie Mae was able to tap a broader range of funds and offer market rates.

In more recent times, Fannie Mae's portfolio has continued to be an important resource when various conditions have depressed primary market lending and liquidity. In this way, the portfolio buffers both lenders and borrowers from a volatile cost of funds.

In volatile environments such as 1983-1984 and more recently in 1987, Fannie Mae retains access to funding sources even if other financial institutions are experiencing a liquidity crisis. For example, in the period from March to May 1987 the 10-year Treasury yield rose by over 125 basis points. In this environment, dealers and investors found making a market in or purchasing MBS less attractive. Fannie Mae stayed in the market during this period purchasing mortgages for its portfolio, helping to restore stability in the mortgage market. Fannie Mae's portfolio also was essential in providing liquidity and stability in the period from July through October 1987, when interest rates again rose sharply (over 175 basis points increase in the 10-year Treasury yield) then fell steeply in the wake of the October stock market "crash."

Second, the portfolio serves as incubator for innovative products, as well as specialized products, that are illiquid. By being available to purchase loans for portfolio, Fannie Mae encourages lenders to develop and originate new types of mortgage loans that meet borrower needs. Typically, these loans will be unacceptable to capital market investors until they are well developed.

The importance of this resource is highlighted by Fannie Mae's role in nurturing a secondary market for ARMs. When the product was in its infancy, lenders experimented with many different structures. Funds for this essential experimentation could only occur through a portfolio operation. Securitization simply provides no substitute for portfolio purchases in such situations because investor requirements for familiarity and liquidity mean that product development, standardization and market acceptance must occur before securitization is feasible.

The portfolio also is important in providing liquidity for multifamily originations, which do not lend themselves easily to securitization. The multifamily portfolio operations of Fannie Mae inject substantial liquidity into this market, with $8.3 billion outstanding in the portfolio as of December 31, 1989.

Finally, the portfolio is apt to prove a critical resource in assisting the RTC in liquidating failed thrift assets in the most efficient manner, minimizing ultimate losses to the taxpayer.

Because of our large, efficient scale of operations our portfolio is well suited to handle many different types of products that are not easily securitized but are good, solid investments. For instance, our portfolio can absorb ARMs that rely on nonstandard indices if they are seasoned and performing well. We purchased $107 million of such ARMs from the FSLIC in August, and could deal similarly with the RTC.

By buying such products for our portfolio, Fannie Mae can help the RTC maximize the gains from such assets in two ways. First, such nonstandard products are the most likely to bring lower or no bids from the typical acquirer of mortgages. And for most bidders who might want to acquire a thrift institution, the franchise value of the old thrift resides in its deposit base, and its standard liquid performing assets. To such bidders, nonstandard loans (however well underwritten or performing) add less value to the franchise.

Second, and this consideration applies generally to any RTC asset, good, performing assets at the time of the RTC takeover may become nonperforming if the conservatorship lasts for a lengthy period. Time is always at a premium in maximizing the sale of receivership or conservatorship assets because of the high staff turnover and loss of expertise that generally accompany these circumstances. Loss of staff can quickly lead to deterioration of asset management and servicing, leading to further losses as incipient problems are not monitored or addressed effectively.

The RTC is especially likely to be vulnerable to losses caused solely by delays, as the sheer size of its caseload will require careful, judicious management -- over a period of years in some cases -- to avoid asset "dumping" that could further depress local markets and undercut its own returns. The danger of such losses is, of course, even greater in the case of nonstandard home loan products with little present liquidity. By having a portfolio ready to purchase high quality nonstandard products, Fannie Mae can be of special service in helping the RTC obtain maximum value for its assets, reducing taxpayer costs.

It is important to emphasize in this connection that all of Fannie Mae's dealings with the RTC will not only meet the RTC's high standards concerning fair and open bidding, but also will meet our high standards with regard to the quality of assets purchased and the relationship between risk undertaken and fee or price received for undertaking that risk.

VII. FANNIE MAE'S FINANCIAL CONDITION.

OVERVIEW

Fannie Mae's achievements in the 1980s constitute one of the great financial turnaround and housing success stories of the decade. Nine years ago, Fannie Mae was a company caught in the outdated strategy of borrowing short and lending long -- and losing more than $1 million a day. Many financial service firms, and indeed firms of all types across the country, fell victim to the skyrocketing, volatile rates during this era and went out of business. By contrast, Fannie Mae's management directed a full recovery, without asking for or receiving federal funds. We instead relied on developing a new line of business -- our mortgage-backed securities, using advanced technology to adapt to the new environment, and engineering sophisticated risk management systems to minimize both interest rate and credit risk.

Fannie Mae today is one of the most profitable companies in America with record earnings in 1988 of $507 million and $807 million in 1989. Our 1989 earnings represented a jump of 59 percent from 1988, and we expect earnings growth to continue.

Fannie Mae's robust earnings and steady increase in capital through growth in retained earnings build on a strategy that nevertheless accepts less near-term profit for the long-term benefits of stable earnings, particularly stability in the face of changing interest rates.

One of the most striking illustrations of our success is our ability to post record profits in the face of substantial rate volatility in the last two years. Fannie Mae has reported new earnings records in each of the last eight quarters, while interest rates rose a full 250 basis points then declined over 150 basis points.

EARLY EXPERIENCES

In its first decade as a private company, Fannie Mae functioned in an environment of relatively stable interest rates. It premised its operations on a presumption shared by most financial institutions -- that interest rates would fluctuate only within historically familiar ranges.

During this period, Fannie Mae served exclusively as a portfolio lender. The company raised funds by issuing debt instruments that included heavy reliance on relatively short-term borrowings; and it used the proceeds to purchase long-term, assumable fixed-rate mortgages which it held until they were paid off. Fannie Mae bought mortgages by issuing optional-delivery commitments to purchase loans up to twelve months later at a price that was guaranteed at the time the commitment was made. The risk in such commitments was one-sided, however, because the guaranteed yield and optional-delivery nature of the commitments almost always resulted in adverse selection against Fannie Mae. If interest rates rose between the time that the commitment was issued and when it expired, lenders could sell to Fannie Mae at par what were, at the time of delivery, below-market-rate mortgages. If, on the other hand, interest rates fell in the interim, lenders had the option of not delivering the profitable mortgages to Fannie Mae -- either retaining them in their portfolios, or selling them at higher prices to others.

Although this approach proved successful for Fannie Mae's first ten years as a private company, it had been developed in an economic climate of stable interest rates and government caps on rates payable to the savers who funded thrift operations. In the late 1970s, the U.S. economy was buffeted by rampant inflation and unprecedented high and volatile interest rates that soared beyond 20 percent. These conditions, which would have been unthinkable to policy makers a few years earlier, devastated many businesses of all types and totally changed the risk equation for financial intermediaries and especially for mortgage lenders. In this new environment, Fannie Mae's managers were confronted with a portfolio that earned a yield well below the company's cost of funds, and previously-robust earnings turned to severe losses. Between 1978 and 1981, the interest rate spread between Fannie Mae's mortgage portfolio and its outstanding debt shifted from a positive 0.54 percentage points to a negative 1.43 percentage points, and the company went from earning $178 million in 1978 to losing $207 million three years later.

STEPS TAKEN TO IMPROVE THE COMPANY'S FINANCIAL POSITION AND REDUCE BUSINESS RISK

Fannie Mae's flexibility as a privately-owned company enabled it to respond swiftly and effectively to the drastic structural forces that were reshaping the economics of home mortgage finance.

Beginning in 1981, Fannie Mae revamped its operations. First, the company addressed its immediate financial crisis. As part of that strategy, Fannie Mae boosted loan purchases to increase fee income and to take advantage of the high interest-rate environment of the early 1980s to add higher-yielding mortgages to its portfolio at favorable spreads relative to its borrowing costs. Between 1980 and 1982, Fannie Mae nearly doubled the annual volume of loans it purchased and increased the average return on its portfolio from 9.2 percent to 10.7 percent. Although total interest expenses still exceeded total interest income, the negative interest rate spread narrowed from 1.57 percent at the end of 1981 to 0.60 percentage points by the end of 1982.

Around the same time, Fannie Mae changed the manner in which it purchased mortgages. The company effectively replaced the optional-delivery commitment with a short-term mandatory commitment. By obligating lenders to deliver loans to Fannie Mae at the agreed-upon price and term regardless of market fluctuations during the commitment term, these commitments share between Fannie Mae and lenders the risk associated with changes in interest rates. Similarly, recognizing the financing creativity demanded by the market in the early 1980s, Fannie Mae began to negotiate transactions for the purchase of loans whose characteristics differed somewhat from the company's standard purchased products.

These actions proved effective, and the company returned to profitability in 1983. Fannie Mae also initiated a long-term strategy to desensitize future earnings from interest rate movements. The major changes included:

- o Managing and minimizing interest rate risk by (1) restructuring its asset/liability maturity mix; and (2) introducing mortgage-backed securities;
- o Improving credit quality and increasing reserve allowances for losses; and
- o Increasing the company's capital base.

RESTRUCTURING OF MORTGAGE AND DEBT PORTFOLIO

We manage our loan portfolio -- which is essentially a buy-and-hold rather than a buy-and-sell operation -- to achieve the highest possible return while maintaining a close estimated maturity and duration match between assets and liabilities. We began actively restructuring the portfolio in the early 1980s to better insulate the company from the effects of future changes in interest rates. In 1981, the company became the first national purchaser of adjustable-rate mortgages in the secondary market. These loans, whose return fluctuates with interest rates, accounted for between one-fifth and one-third of all purchases in the 1982-1985 period. They now account for about 20 percent of the portfolio.

In addition, because of the rapid growth in the securitization by Ginnie Mae of FHA and VA mortgages, Fannie Mae gradually reduced its holdings of these loans. These mortgages are assumable over their lives; they therefore carry greater interest-rate risk for investors. Because of the shift toward Ginnie Mae as the dominant secondary market for FHA and VA mortgages, Fannie Mae's yearly purchases of government-insured and guaranteed loans fell from 55 percent of all one- to four-family home mortgages bought between 1977 and 1980 to less than 2 percent of all mortgages purchased in 1986. Furthermore, when interest rates fell to a cyclical low in 1986, Fannie Mae sold $10 billion of the older FHA and VA loans that remained in its portfolio.

Fannie Mae further reduced its interest-rate risk by more closely matching the duration of the mortgages it holds to the duration of its outstanding debt instruments. On the asset side of the ledger, both the company's increased reliance on ARMs and the move away from assumable FHA and VA mortgages helped shorten the average remaining life of the loans in its portfolio. In 1985 Fannie Mae began buying 15-year fixed-rate first mortgages, and the company started purchasing 10- and 20-year mortgages two years later. Also, since receiving the authority to do so in 1981, Fannie Mae has purchased second mortgages, which generally have shorter maturities than first mortgages.

On the liability side of the ledger, in the first few years of the 1980s, Fannie Mae first shortened the average maturity of the debt it issued to avoid locking in the high interest rates that were prevalent at that time. When rates began to fall, however, the company moved aggressively to lengthen the average maturity of its borrowings in order to shrink the substantial mismatch that had developed between the average duration of the company's mortgage portfolio and the average maturity of the debt that financed it. Following this strategy, the average maturity of all Fannie Mae's outstanding debt declined from 35 months as of the end of 1980 to 27 months at the end of 1982, and then rose to 47 months by the end of 1989. As a result of these efforts, the company's duration gap between assets and liabilities improved from 36 months at the end of 1980 to about 6 months in December 1989.

Not only has Fannie Mae brought the expected durations of its assets and liabilities close, but we have also made great strides in protecting that duration gap from major interest rate shifts by the issuance of indexed sinking fund and callable debentures. These will allow us to redeem our longer-dated debt in the event of a precipitous decline in rates and a quick pay down of our mortgage assets. In the last 18 months alone, more than one quarter of our long-term debt issues, or nearly $8 billion of debt, carried provisions which will allow us to redeem the debt early should rates fall. Thus, Fannie Mae should never again have any incentive to "grow its way out of" an interest rate mismatch.

INCREASING RELIANCE ON MORTGAGE-BACKED SECURITIES

Fannie Mae also shielded earnings from interest-rate volatility by relying increasingly on guaranty fees generated from its mortgage-backed securities outstanding. Since 1981, Fannie Mae has issued securities that are backed by designated pools of residential mortgages. Fannie Mae guarantees timely payment of principal and interest to the security holder; in return, the company collects both a small upfront commitment fee and an ongoing guaranty fee that is based on the amount of principal outstanding on the pool of mortgages backing each security. The MBS business provides a fee-based income stream that has very little sensitivity to interest rate risk.

Fannie Mae offers two basic types of MBS. Under one alternative (the regular servicing or lender recourse option), the lender bears the risk of any losses resulting from defaults and foreclosures on the underlying mortgages. Under the other (the special servicing option), Fannie Mae bears the foreclosure risk and charges a higher guaranty fee to reflect the company's added financial exposure. Fannie Mae also issues MBS where the lender provides credit backing not only through recourse but also by providing Fannie Mae with collateral. Currently, $94.3 billion, or 41 percent of our MBS, is backed by lender recourse, including $27 billion for which there is collateral backing the recourse agreement.

The volume of MBS issued each year has grown sharply since 1981. MBS issuances rose from less than $1 billion in that year to more than $60 billion in both 1986 and 1987 when a boom in refinancing created a record demand for mortgage funds. For 1989, MBS issuances totalled a record $70 billion, compared with $55 billion in 1988. MBS outstanding at year end 1989 totalled $228 billion. Income from MBS guaranty fees increased to $408 million in 1989 from $328 million in 1988.

IMPROVING CREDIT QUALITY AND INCREASING RESERVE ALLOWANCES

In running our two businesses, we also control credit risk. Indeed, we take this responsibility so seriously that we have elevated our office responsible for this function to the same independent level as our offices responsible for marketing and mortgage operations generally.

Fannie Mae responded to the flood of undue credit risk that entered the housing finance system in the early 1980s by a major tightening of our underwriting standards in 1985. These underwriting standards apply both to the mortgages we purchase for portfolio and those we guarantee as MBS.

Under the new standards, for example, we require that borrowers contribute from their own funds at least 5 percent of the sale price of the home they are financing, unless the borrower receives gifts (usually from relatives) totaling more than 20 percent of the sale price. Other improvements include tighter borrower qualification standards for higher risk loans with low down payments, requiring an "excellent" credit history when higher qualifying ratios (debt to income and housing debt to income) are used for loans with low down payments, reducing the maximum loan-to-value ratios for investment properties, and placing limits on the types of mortgages we will purchase.

These limits deal with loans that proved to have sharply higher default risks due to features such as extremely low equity combined with potential "payment shock" when interest rates sharply increase. Today, we no longer buy adjustable-rate mortgages without caps on the potential interest rate increases. For ARMs with LTVs higher than 80 percent and certain other risk factors, we require lenders to qualify borrowers at the maximum interest rate that could be in effect after the first year. We also revised our loan eligibility standards to limit initial interest rate discounts. In April 1989, we revised the standard to preclude start rates that are more than 300 basis points lower than the index-calculated rate.

These changes have appreciably affected the character of the mortgages that Fannie Mae has purchased or guaranteed, and the impact is being seen in the composition of the portfolio as a whole. Approximately 85 percent of all conventional single-family home mortgage loans in our portfolio and mortgage-backed securities outstanding today were underwritten under those stricter credit guidelines.

Most of these loans have down payments of 20 percent or more. In fact, the original average loan-to-value ratio for both our portfolio and mortgage-backed securities outstanding is approximately 72 percent. We know from experience the higher the down payment or equity, the less likely the loan will default. As a result, the rate of serious delinquencies of mortgages purchased after the new standards took effect is only a fraction of the rate on loans bought in 1985 at the same age. This has led to a reduction in foreclosed loans from a peak of 4,408 properties in the third quarter of 1987 to 2,494 for the fourth quarter this year.

In more recent years, Fannie Mae also has used the lender risk component to further help manage its exposure to higher risk mortgages. For example, of the $39.1 billion in single-family ARM mortgage-backed securities outstanding, 81.1 percent is backed by lender recourse and collateral. Of our $8.7 billion in multifamily MBS outstanding, more than 80 percent is backed by lender recourse and collateral. Consequently, of Fannie Mae's $134 billion of MBS for which we bear the credit risk, less than 6 percent are ARMs and less than 2 percent are multifamily.

Despite these trends, we continue to use conservative models to project future losses and to set aside reserves for losses. We have been adding more to our loss reserves in each of the last 21 quarters than we have actually charged off. This has resulted in our loan loss reserves rising by $333 million since 1984, to a total of $463 million at the end of 1989. Our objective is to build the reserves to the point where provisions for new business alone will sustain them at a prudent level.

Fannie Mae's charged-off loan losses peaked in the fourth quarter of 1987 at $85.2 million; charged-off losses in the fourth quarter of 1989 were only $56.1 million. Annual charge-offs for losses on both portfolio and mortgage-backed securities for 1989 were $243.5 million, compared to $314.7 million in 1988 and $285 million in 1987.

EFFECTS ON FANNIE MAE'S FINANCIAL STATUS

The actions outlined above have revitalized every significant aspect of the company's financial standing.

First, earnings have improved dramatically as our interest rate and credit risk strategies have borne fruit. After severe losses in the early 1980s, earnings surged to $376 million in 1987, to $507 million in 1988, and to $807 million in 1989. More important, the company relies increasingly on income sources that are less sensitive to shifts in interest rates.

Second, Fannie Mae has greatly reduced the financial risk associated with its portfolio operations. Two key measures of interest rate sensitivity underscore the significant reduction of mismatch in our portfolio. The first indicator is the one-year maturity gap; this compares the dollar amount of assets we expect will mature or reprice over the next 12 months with the dollar amount of liabilities that will reprice or mature over the same period. We express this difference as a percent of our total assets. It gives us a reasonably good indication of the sensitivity of our net interest income to fluctuations in interest rates over the next 12 months. The one-year maturity gap at the end of December 1989 was a positive 4 percent.

The next measure -- the duration gap -- is the difference between the estimated durations of assets and liabilities. We use it to measure the portfolio's sensitivity to interest rates over a longer time than the maturity gap. Fannie Mae whittled the duration gap from 36 months at the end of 1980 to about 6 months at the end of 1989. The expected duration of our mortgage assets is about 45 months, while that of our debt funding those assets is about 39 months.

As a result of this success in matching assets and liabilities, Fannie Mae's earnings are far less sensitive to swings in interest rates than they were -- and probably less sensitive than most other financial services companies. For example, a 100-basis-point increase in interest rates at the end of 1981 would have reduced the company's earnings by an estimated $1.10 per share. But during the two years ending December 31, 1989, while rates rose by 250 basis points then fell almost 150 basis points, the company enjoyed steadily increasing profits. That result was possible because the portfolio's profitability steadily increased during this period, with our net interest income rising from $171 million for the quarter ending March 31, 1988 to $352 million for the quarter ended December 31, 1989. Quarterly MBS fees also increased during this period, rising from $75 million for the first quarter of 1988 to $111 million for the final quarter of 1989.

Finally, management has plowed the bulk of our healthy profits right back into the business as retained earnings, including additions to retained earnings of $450 million in 1988 and $704 million in 1989. This strategy fostered dramatic growth in our capital base. We have every reason to believe this upward trend will continue, and that Fannie Mae will add substantially more to retained earnings in the next two years than in the prior two.

Since 1981, Fannie Mae also has added $652 million to its capital base through equity issuances. These included: a $103 million debt-for-equity swap in 1982; $107 million added to capital through the issuance of additional common stock in 1985; the issuance of $68 million of debt with warrants in 1986; and $374 million added to capital through another issuance of common stock in 1987. We have the opportunity to further increase equity by over $500 million in early 1991, when the warrants outstanding expire and are expected to be converted to stock.

The overall result: since 1986, Fannie Mae has more than halved its leverage and doubled its equity, now at $2.99 billion. Capital also exceeds the regulatory level established by HUD under guidelines in Fannie Mae's charter, currently a maximum ratio of debt to capital of 20-to-1.

Fannie Mae's strong capital base continues to grow rapidly -- and in our view can withstand nearly any adverse economic condition.

LIST OF REPORTS PROVIDED BY FANNIE MAE TO THE PUBLIC, THE FEDERAL GOVERNMENT AND CONGRESS

February 1, 1990

LIST OF REPORTS PROVIDED BY FANNIE MAE TO THE PUBLIC, THE FEDERAL GOVERNMENT AND CONGRESS

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The following lists all the reports that Fannie Mae currently provides to the public, the Federal Government and Congress concerning the extent and nature of its activities and the financial risks associated with such activities, the timing of such reports and a description of the general content of the reports. The notation of "Public" under the column "Recipient" indicates the report is available upon request by anyone. The column "Timing" reflects when a report is prepared. Reports available to the Public typically are available upon request at all times and not just at the time of preparation.

Governmental Reports

Name	Recipient	Timing	Description
Business Activities Report	HUD - Pursuant to 24 CFR 81.22	Annually	This report covers such matters as: material changes and developments in Fannie Mae's business since the beginning of the year; a general "business plan" for the following year, including volumes of commitments, purchases, and debt to be issued*; the location of the company's operating sites, including lease information; a description of material litigation; names and ages of executive officers (senior vice president level and above); the terms of bylaws dealing with indemnification of directors and

*Confidential Report

Name	Recipient	Timing	Description
			officers; ownership of Fannie Mae stock by directors and officers: the name and age of directors, as well as the committees on which they serve; the direct remuneration of executive officers*; stock options granted to executive officers*; and any transaction since the beginning of the year between Fannie Mae and an officer or director of Fannie Mae, or any spouse or relative of such officer or director, in which such person has a direct or indirect material interest. See Appendix B to the HUD Regulations for a full description of the content of the Business Activities Report. *Confidential Report
OMB Report	HUD and OMB - pursuant to 24 CFR 81.22 and Item I of Appendix B of HUD Regulations	Annually	The dollar volume of Fannie Mae's loan purchases and sales, commitments and borrowing during the most recently completed Federal fiscal year, together with projections of these data for the following two Federal fiscal years.

Name	Recipient	Timing	Description
Report on Standby and Other Commitments	HUD - pursuant to 24 CFR 81.23 and Item 2 of Appendix B of HUD Regulations	Monthly	Dollar volume of home and project mortgage commitments and various classes of mortgages.
Statement of Loan Portfolio	HUD - pursuant to 24 CFR 81.23 and Item 4 of Appendix C of HUD Regulations	Quarterly	Number and dollar amount of various types of mortgages held by Fannie Mae and the number of loans of each type that are delinquent, assigned, repurchased and foreclosed.
Net Yield on Loan Purchases	HUD - pursuant to 24 CFR 81.23 and Item 6 of HUD Regulations	Quarterly	Net yield (after servicing expense) during the quarter of the following types of loans held by Fannie Mae: conventional whole loans and participations, other conventional loans, VA guaranteed loans, FHA section 203 loans, all other FHA insured loans, all home loans as a group, and conventional multifamily and FHA project loans.

Name	Recipient	Timing	Description
Sellers and Purchasers of Mortgage Loans	HUD - pursuant to 24 CFR 81.23 and Item 7 of Appendix C of HUD Regulations	Quarterly	Amount of loans purchased and sold by Fannie Mae from (and to) mortgage companies, commercial banks, mutual savings banks, savings and loan associations, GNMA, investment bankers and all other financial institutions.
Revenues, Expenditures and Net Income (Loss)	HUD - pursuant to 24 CFR 81.23 and Item 8 of Appendix C of HUD Regulations	Quarterly	Quarterly revenues by various classes of the company's business activities, various costs incurred by the company and net income.
Common Stock	HUD - pursuant to 24 CFR 81.23 and Item 9 of Appendix C of HUD Regulations	Quarterly	Number of shares of stock outstanding, changes in outstanding shares during the quarter, and per share dividends. It also indicates the share increase (or decrease) attributable to various activities, including employee stock plans and stock options.
Special Budget Plan for Secondary Market Operations	HUD	Quarterly	Informs HUD of next quarter's expected volume for commitments, purchases, sales and debenture issues.

Name	Recipient	Timing	Description
Requests for HUD waiver of 24 C.F.R. §81.45(b)	HUD	When debentures will be issued in certificated form	Request for waiver of provision of 24 C.F.R. §81.45(b) providing for Fannie Mae debentures to be issued in book-entry form.
HUD Report No. 3 Fannie Mae Security Issues	HUD	Quarterly	Information relating to purchases of the various types of debt securities by different classes of investors.
Quarterly Report On Common Stock Under Compensation Plans for Employees	HUD	Quarterly	Report on shares issued and outstanding for 1,000,000 shares approved by HUD for issuance to employees.
FHA Debenture Submission	HUD	Monthly	Data on FHA Debentures.
Advisory letters; approval requests	HUD Treasury	From time to time	HUD approval for the initiation of new conventional mortgage programs, changes to existing programs, new MBS programs or changes thereto.
HUD Report Package	HUD, GNMA	Monthly	Data on HUD 312 rehabilitation loans.

Name	Recipient	Timing	Description
REMIC disclosure documentation & "fact sheets"	HUD Treasury	Every 3-6 months	Description of Fannie Mae's REMIC program; documentation for each offering aggregated and forwarded with a "fact sheet" summarizing each transaction during the prior period.
Lender Audit Reports	HUD, Veterans Administration	Promptly after each audit	Information relating to audits of lender's performance and recommended corrective action.
HUD Form 2530 (Previous Participation Certificate)	HUD, General Partner of low-income housing tax credit transaction	Immediately prior to closing of low income housing tax credit transactions in which HUD participates	A listing of all low income housing tax credit investments of Fannie Mae.
Debenture Offering Notice	HUD, Debenture Selling Group, Federal Reserve Bank of New York	At time of each monthly or off-calendar financing	Description of the offering of the applicable debentures, ISFDs, callable and capital debentures.
Financing Calendar	Treasury, Selling Groups for various types of securities	Annually	Proposed financing schedule - approved by U.S. Treasury.
Requests for Treasury approval of issuance of debt obligations	Treasury	As required for debt financings	Fannie Mae requests for approval of issuance of debt obligations.

Name	Recipient	Timing	Description
Weekly Borrowing Report	Treasury	Weekly	Amount sold and redeemed of all short-term and continuously outstanding debt securities.
Report of Short-Term Discount Note Rate Changes	Treasury	Monthly	Summary of discount note rates during the month previously approved by Treasury staff.
Correspondence for Debentures, Residential Financial Securities, Medium-Term Notes and Reopenings	Federal Reserve Bank of New York	At time of each monthly or off-calendar financing	Price, size, coupon, interest payment date and tape information regarding debentures, ISFDs, callable and capital debentures, residential financing securities and medium term notes.
Analysis of Tax Legislation and Treasury Regulations	Federal Reserve Bank of New York	As needed	To provide instructions to FRBNY for tax reporting.
Called FHA Debentures	Federal Reserve Bank of Philadelphia	Annually	Reports FHA debentures by rate, series number, maturity date and amount.
Report of Assets, Liabilities and Positions in Specified Foreign Currencies of Firms in the U.S.	Federal Reserve Bank of New York	Monthly	Special report required by the Federal Reserve Bank of New York.
Monthly Schedule of Principal and Interest Payments	Federal Reserve Bank of New York	Monthly	Reports principal and interest payments on Fannie Mae debt for which Federal Reserve Bank is fiscal agent.

Name	Recipient	Timing	Description
International Capital Forms.	Federal Reserve Bank of New York	Monthly, if activity	Reports funds raised outside the United States (US $ and/or foreign currency denominated).
Foreign Currency Form FC-3.	Federal Reserve Bank of New York	Monthly	Balance of foreign currency denominated liabilities and corresponding exchange contract positions.
International Capital Form CQ-1.	Federal Reserve Bank of New York	Quarterly	Foreign liabilities which do not involve sale of securities.
Monthly Report of Assets, Liabilities and Positions in specified Foreign Currencies of Firms in the U.S.	International Reports Division of the Federal Reserve Bank of New York	Quarterly	Foreign currency denominated liabilities and corresponding exchange contract positions.
Purchases and Sales of Long-Term Securities by Foreigners	International Reports Division of the Federal Reserve Bank of New York	Monthly	Purchases and sales of domestic and foreign securities.
Quarterly Report of Non-banking Business Enterprises	International Reports Division of the Federal Reserve Bank of New York	Quarterly	Foreign liabilities that do not involve the sale of securities.

Name	Recipient	Timing	Description
Statement of Outstanding Debt	Board of Governors Federal Reserve System	Monthly	Letter to Federal Reserve stating Fannie Mae's outstanding debt for publication in Federal Reserve Bulletin.
Memo on Outstanding Debt	Board of Governors Federal Reserve System	Monthly	Dollar amount of debt outstanding.
Federal Budget Data	OMB	Annually	Financial data sent to OMB for inclusion in Appendix to Federal Budget.
Form 56 -- Notice of Fiduciary Relationship	IRS	As needed	Notifies IRS that Fannie Mae acts fiduciary for certain REMICs.
Form 940 -- Employer's FUTA Return	IRS	Annually	Reports unemployment taxes.
Form 941 -- Employer's FICA Return	IRS	Quarterly	Reports FICA withheld from wages.
Form 990-PF -- Return of Private Foundation	IRS	Annually	Fannie Mae Foundation tax return
Form 1041 -- Fiduciary Return of Income	IRS	Annually	Income tax return for each MBS trust and SMBS trust.
Form 1042 -- Return of Income Tax Paid at Source	IRS	Annually	Reports income tax withheld from foreign investors.
Form 1066 -- REMIC Income Tax Return	IRS	Annually	REMIC income tax return.

Name	Recipient	Timing	Description
Form 1099-A -- Information Return for Acquisition of Secured Property	IRS, borrowers whose property has been acquired by foreclosure	Annually	Reports the amount of debt satisfied by the acquisition of the property.
Form 1099-DIV -- Information Return for Recipients of Dividends	IRS, Shareholders	Annually	Reports dividends paid to stockholders.
Form 1099-INT -- Information Return for Recipients of Interest Income	IRS, REMIC regular interest holders, certain debt securityholders	Annually	Reports interest paid to REMIC investors.
Form 1099-OID -- Information Return for Original Issue Discount	IRS, REMIC regular interest holders, certain debt securityholders	Annually	Reports OID accrued to REMIC investors.
Form 1099-MISC -- Information Return for Recipients of Miscellaneous Income	IRS, independent contractors hired by Fannie Mae	Annually	Reports payments made to independent contractors for services.
Form 1120 -- Corporation Income Tax Return	IRS	Annually	Fannie Mae's tax return.
Form 8281 -- Information Return for Publicly Offered OID Instruments	IRS	Within 30 days after issuance	Provides tax information to investors.

Name	Recipient	Timing	Description
Form 8811 -- Information Return for REMIC Issuers	IRS	Within 30 days after a REMIC is issued.	Provides tax information to investors.
Schedule K-1 -- Beneficiaries Share of Income	IRS, MBS and SMBS Investors	Annually	Reports each investor's share of income and deductions of the trusts.
Schedule Q	IRS, REMIC residual interest holders	Quarterly	Notice to residual interest holders of their allocation of REMIC net income or net loss.
IRS Form 5500	IRS	Annually	Annual Financial Reports for each Qualified (ERISA) Plan.
Requests for Determination Letters (Qualified Plans), Private Letter Rulings (certain non-Qualified Plans[1]).	IRS	For new plans and as needed for major amendments	Description of plan provisions and request for IRS to rule that plan is within requirements of Code and regulations.
IRS Form 2848 (Power of Attorney)	IRS	As needed	Authorization for representative to act on behalf of Fannie Mae in federal tax matters.

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[1] Non-qualified Plans: Deferred Compensation Plans (Career and Elective), Employee Stock Purchase Plan and Executive Pension Plan.

Name	Recipient	Timing	Description
IRS Forms 5310 Notice of Intent to Terminate Plan, 6088 (Distributable Benefits), 8717 (User Fees)	IRS	As needed (e.g., filed when we terminated PAYSOP in 1989)	Statutorily required notice to IRS that plan will be terminated and distributions will be made and associated forms.
Offering Circular for 1985 Employee Stock Purchase Plan	Eligible employees	Annually to accommodate changes in Plan and law	Description of terms and conditions of annual offering of IRC Section 423(b) Plan.
EEO-1 Report	EEOC	Annually	Employment data for each of Fannie Mae's offices. The report includes by job category, the number of employees by race (White, Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan native) and sex.
Summary Plan Descriptions (SPD) and Summary Material Modifications (SMM) under each Qualified Plan[2]	Department of Labor and all Plan Participants	At least every 5 years and more frequently to reflect material changes to Plans	Statutorily required communication to Plan Participants to describe rights and benefits under Plans.

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[2] Qualified Plans: Retirement, Thrift and Savings, ESOP, PAYSOP (terminated 1989) and Welfare Plans (Insurance Plans).

Name	Recipient	Timing	Description
Form 1-ES - Estimated Premium Payment and Form 1 - Annual Premium Payment	Pension Benefit Guarantee Corp.	Annually	Transmits annual insurance premiums as statutorily required for the Retirement Plan.
Reports Relating to Securities			
Annual Report	Beneficial owners of stock, analysts, Public	Annually	Contains management's discussion and analysis of financial condition and results of operations, independent auditors' report, audited financial statements.
Quarterly Report	Beneficial owners of stock, analysts, Public	Quarterly	Contains summary statement of operations, cash flows, balance sheets, commitments and contingencies and other corporate information.
Notice of Annual Meeting of Stockholders and Proxy Statement	Beneficial owners of stock, analysts, Public	Annually	Disclosure document following New York Stock Exchange and SEC reporting requirements.

Name	Recipient	Timing	Description
Notices to New York Stock Exchange pursuant to New York Stock Exchange Rule 204.00	New York Stock Exchange, Midwest Stock Exchange, Pacific Stock Exchange, Transfer Agent, Co-Transfer Agent	As required by N.Y.S.E. Rule 204.00	Disclosure regarding any material event affecting the Corporation.
Listing Applications	New York, Midwest, Pacific, Luxembourg and Paris Stock Exchanges	Periodically whenever new securities are to be listed	Applications to list shares on each Exchange pursuant to the rules of each Exchange.
Monthly Summary	Investors, analysts, Public	Monthly	Information relating to Fannie Mae's monthly and year-to-date activity for mortgage commitments, purchases, portfolio, debt issued and mortgage-backed securities.
Investor-Analyst Report	Investors, analysts, Public	Quarterly	Quarterly financial statements including information relating to short-term notes, analysis of borrowing costs, rate of return analysis on net interest income, mortgage yield and cost of debt issued/matured, commitments, mortgage purchases portfolio liquidation activity, MBS, and conventional loan/FHA/VA foreclosure activity.

Name	Recipient	Timing	Description
Fixed Income Investment Opportunities Brochure	Investors, Dealers, Public	Upon request	Informational brochure describing Fannie Mae debt securities.
Mortgage-backed securities: Understanding the Value of MBS Investments	Investors, Dealers and Traders	As requested and at seminars, meetings	Explains MBS, its structure, Fannie Mae dealers and investment opportunities.
Introducing Fannie Mae	Investors, Dealers, Public	Upon request	Brochure introducing Fannie Mae
Offering Circular for Underwritten Debt Securities	Underwriters, Investors, Public	In connection with each underwritten financing (Approximately 10-15 times a year during each of 1988 and 1989)	Description of specific debt securities: comprehensive discussion of Fannie Mae, capitalization, management's discussion and analysis of financial condition and results of operations, government regulation and the Charter Act, Fannie Mae's business, recent legislative and regulatory developments, management, independent auditors' report and audited financial statements.

Name	Recipient	Timing	Description
Offering Circulars for Medium Term Notes, Euro-Medium Term Notes	Medium Term Notes or Euro-Medium Term Notes Agents, Investors, Public	Continuously available; updated as necessary	Description of Medium Term Notes and Euro-Medium Term Notes; comprehensive discussion of Fannie Mae, capitalization, management's discussion and analysis of financial condition and results of operations, government regulation and the Charter Act, Fannie Mae business, recent legislative and regulatory developments, management, independent auditors' report and audited financial statements.
Guide to Debt Securities	Members of Debt Selling Groups, Investors, Public	Continuously available; updated as necessary	Description of debt securities, Master Notes and Investment Agreements; Indexed Sinking Fund Debentures; comprehensive discussion of Fannie Mae, capitalization, management's discussion and analysis of financial condition and results of operations, government regulation and the Charter Act, Fannie Mae's business, recent legislative and regulatory developments, management, independent auditors' report and audited financial statements.

Name	Recipient	Timing	Description
Notice published in a Paris legal publication ability regarding availablility of Fannie Mae's annual reports through the paying agents for Fannie Mae's issue of French franc debentures			Stock Exchange, where Fannie Mae's French franc debentures are listed.
Securities Report	Minister of Finance of Japan; lead manage of certain debentures sold in Japan	Annually (September of each year)	Comprehensive Financial and performance data of Fannie Mae substantially similar to that appearing in the Guide to Debt: a summary of the U.S. Government and economy.
Semi-Annual Report	Minister of Finnace of Japan; lead manager of certain debentures sold in Japan	Annually	This reports includes material changes since the date of the Securities Report, in addition to changes relating to the United States' Government and economy.
Securities Registration Statement	Minister of Finance of Japan; lead manager of certain debentures sold in Japan	Approximately once a year (during 1988 and 1989)	Description of debentures offered, and incorporation by reference the latest Securities and Semi-Annual Reports.

Name	Recipient	Timing	Description
Tombstone advertisements	Newspaper publication	From time to time	Announcements of certain offerings placed by Fannie Mae or the underwriter of the offering.
Debenture Pricing Announcement	Wire Services: Reuters, Knight Ridder, Telerate, Dow Jones Capital Markets	At time of each monthly or off-calendar financing	Size, maturity, payment dates for debentures, ISFDs, callables and capital debentures.
MBS Prospectus	MBS lenders, Dealers, Public	Continuously available	Description of Fannie Mae's MBS program: financial and performance data of Fannie Mae substantially similar to that appearing in the Guide to Debt.
MBS & SMBS Prospectus Supplements: SMBS Preliminary Data Statements	MBS lenders, Dealers, Public	With each issuance of an MBS or SMBS trust	Description of the particular MBS & SMBS offering and the underlying assets.
MegaPool Prospectus & Prospectus Supplement	MBS lenders, Dealers, Public	With each issuance of a MegaPool trust	Description of Fannie Mae's MegaPool program, the particular MegaPool offering and the underlying assets.

Name	Recipient	Timing	Description
REMIC disclosure documentation	Dealers, Public	With each issuance of a REMIC trust	Description of Fannie Mae's REMIC program, the particular REMIC offering and the underlying assets; financial and performance data of Fannie Mae substantially similar to that appearing in the Guide to Debt.
MBS, SMBS, MegaPool, REMIC Indenture Supplements	Certificateholders or Dealers on their behalf, on request	An Issue Supplement is done for each MBS, SMBS, MegaPool or REMIC Trust and is distributed upon request	The document that, pursuant to the applicable "master" trust instrument, creates a specific MBS, SMBS, MegaPool or REMIC trust.

Name	Recipient	Timing	Description
Reports Relating to Underwriting Standards			
MBS Guide, Selling Guide, Servicing Guide, Multifamily Guide, DUS Guide	Fannie Mae lenders, other subscribers, Public, DUS lenders, multifamily lenders	Continuously available to lenders upon request and to others on a subscription basis	Comprehensive description of Fannie Mae portfolio purchase and MBS programs, standards applicable to Fannie Mae seller/servicers and delivery, servicing and other requirements of Fannie Mae portfolio purchase and MBS programs; updates provided as required.
Lender Announcements, Lender letters	Fannie Mae lenders, other subscribers to Fannie Mae Guides, Public, except that some lender memos are available only to product-line participants	As needed	Changes to or clarifications of existing policy between updates to the applicable Guide; generally superseded by Guide revisions.

Name	Recipient	Timing	Description
Other Publications Describing Products, Programs and Services			
ARM Lending Library	Lenders, Public	Upon request and at seminars, meetings	Kit containing a collection of literature on Fannie Mae's ARMs.
ARM MBS	Lenders, Public	General mailings, upon request and at seminars, meetings	Provides step-by-step guidelines for securitizing ARMs with Fannie Mae.
ARM Mortgage-Backed Securities: Understanding the ARM MBS and its Competitive Performance	Investors, Dealers and Traders	As requested and at seminars, meetings	Explains the ARM MBS, features of the ARM and how they affect the performance of our securities.
The ARM Source	Investors, Dealers and Traders	Published and distributed quarterly	Provides key characteristics of all ARM MBS pool types; also contains reference tables that match MBS pool numbers to the underlying loan type.
The Biweekly Mortgage: An easy, affordable way to own your home faster	Consumers	Upon request and at seminars, meetings	A consumer introduction to the biweekly mortgage.
Biweekly Mortgages Servicer Q&A	Servicers, Public	Upon request and at seminars, meetings	Details on how to service biweekly mortgages sold to Fannie Mae.

Name	Recipient	Timing	Description
Biweekly Lender Brochure	Lenders, Public	Upon request and at seminars, meetings	Summary of Fannie Mae's biweekly mortgage program.
Broker Handbook	Real estate brokers who provide services to Fannie Mae	Available	Sets forth procedures that apply to Fannie Mae listings.
Controlling Default	Lenders, Public, Servicers	General mailings upon request and at seminars, meetings	Provides assistance to managing all aspects of default.
A Consumer's Guide to Seniors Housing Opportunities	Lenders, Public	As requested and at seminars, meetings	Description of Fannie Mae demonstration project.
Community Investment: Approaches to Financing Low- and Moderate-Income Housing	Lenders, Public	As requested and at seminars, meetings	Brochure describing how Fannie Mae and the Office of Low- and Moderate-Income Housing helps lenders address their obligations under the Community Reinvestment Act.
Conventional Multifamily Mortgages-Prior Approval	Lenders, Public	As requested and at seminars, meetings	Description of mortgage products and services for multifamily loans to be sold to Fannie Mae for portfolio, not Conforming to the DUS program.

Name	Recipient	Timing	Description
Eligibility Requirements	Lenders, Public underwriters	General mailings, upon request and at seminars, meetings	Explains Fannie Mae's requirements for determining a loan and borrower eligibility
Expanding Opportunities for Community Banks	Lenders, Public, Community banks, Commercial banks	General mailings upon request amd at seminars, meetings	Provides information for assessing profit opportunities in the primary and secondary and at residential lending markets.
Introducing a New ARM for Today's Home Buyer: How the Three-Year ARM Offers Payment Stability and Lower Costs	Consumers, Public	Upon request and at seminars, meetings	Brochure describing how three-year ARMs work from a consumer's perspective.
The Fannie Mae Bond Buyer & Monthly ARMs Report & ARM Analysis Tape	Subscribers to The Bond Buyer publication & tape format	Monthly	Updated statistical information on MBS trusts.
Fannie Mae Gives Investors the Low Down	Potential Investors in TX, OK and LA	As requested	Brochure explaining Fannie Mae's REO financing.
Fannie Majors: The MBS with all-star performance	Lenders, Public	Upon request, and at seminars, meetings	Brochure describing how our multiple-lender pools work.

Name	Recipient	Timing	Description
Fannie Mae Mortgage Market Survey	Lenders who participate in the survey receive a copy of the results. In December 1989, there were a total of 40 participants	Produced and distributed monthly	Participants who submit a monthly questionnaire receive marketing information derived from the results. The aggregate results include mortgage pricing, product trends, and market volume indicators.
Fannie Mae's Low- and Moderate-Income Housing Initiatives	Housing developers, Lenders; federal state, and local housing officials; officials of Regional Federal Reserve Banks and Federal Home Loan Banks; press; Public	Annually	Book describing the Low- and Moderate-Income Housing Initiatives.
Financial Profiles	Employees, Investors	Quarterly & on request	Summary of financial statements.
Focus: A Closer Look at ARM Pricing	Lenders, Public	General mailings, upon request and at seminars, meetings	Explains how to calculate the approximate price Fannie Mae will pay for ARMs sold for cash.

Name	Recipient	Timing	Description
Focus: Delivering for Cash	Lenders, Public, loan shippers	General mailings, upon request and at seminars, meetings	Serves as a "how-to" guide for delivering loans to Fannie Mae for cash.
Focus: Appraisal Guide	Lenders, Public, Underwriters, Appraisers	General mailings, upon request and at seminars, meetings	Lists appraisal guidelines in a consolidated format.
Housing America Brochure	Investors, analysts, Public, Lenders	Upon request	Overview of Fannie Mae's history, current operations, business and financing activities and MBS.
How to Buy a Foreclosed Home	Potential homebuyers	As requested	Brochure informing a first-time homebuyer how to buy a foreclosed home.
Intermediate-Term Mortgage Kit More Than Plain Vanilla: A complete menu of intermediate-term mortgage programs	Lenders, Public	Upon request and at seminars, meetings	Complete kit of intermediate-term literature, as well as audio cassette, describing our intermediate-term mortgage products.

Name	Recipient	Timing	Description
Intermediate-Term Calculator	Lenders, Public	Upon request and at seminars, meetings	Calculator of sample mortgage payments, equity build-up, and costs for 7-, 10-, 15-, 20-, and 30-year mortgages.
Introducing our Secondary Market Services: The ABCs of doing business with Fannie Mae	Lenders, Public	Upon request and at seminars, meetings	Brochure giving overview of Fannie Mae's secondary market activities including single- and multifamily purchase programs, MBS, servicing, and lender approval.
Is There Anyone Who Could Help Two Dedicated Individuals With a Moderate Income To Build Their Dream House?	Housing developers, Lenders, federal, state and local housing official, officials of Regional Federal Reserve Banks and Federal Home Loan Banks	Continuously available	Reprint of column by Kenneth R. Harney about finding affordable housing and letters received in response to the article.
The Key Reasons Why Our Foreclosures Sell Best	Public, Real Estate Brokers	As requested	Brochure explaining why Fannie Mae's foreclosed properties represent good values to potential buyers.

Name	Recipient	Timing	Description
Keys to Doing Business	Lenders, Public	Upon request and at seminars, meetings	Laminated cards detailing where to find yields, how to obtain a commitment, and the mortgage products available from Fannie Mae.
LASER Reporting: Basic Training	Lenders, Public	General mailings, upon request and at seminars, meetings	Provides an overview of Fannie Mae's reporting and remitting requirements under LASER.
LASER Reporting: Reconciling Your LASER Portfolio	Lenders, Public	General mailings, upon request and at seminars, meetings	Provides instructions for reconciling under Fannie Mae's LASER system.
LASER Reporting: Variable Rate and Payment Loans	Lenders, Public	General mailings, upon request and at seminars, meetings	Explains the LASER reporting process for variable rate and payment loans.
Lender Welcome Kit	Newly approved Lenders	Upon request and at seminars, meetings	Kit containing a collection of brochures, workbooks and other literature on the various aspects of doing business with Fannie Mae.

Name	Recipient	Timing	Description
Low- and Moderate-Income Housing	Lenders, Public	As requested and at seminars, meetings	Updates and supplements introduction section of Fannie Mae's Low- and Moderate-Income Housing Initiatives.
Market Line	Housing developers, Lenders, federal, state, and local housing officials, officials of Regional Federal Reserve Banks and Federal Home Loan Banks, press	Continuously available	Quarterly newsletter on single- and multifamily product and marketing issues.
A Mortgage You Can Bank On: How a 15-year mortgage can help you save for the future	Consumers, Public	Upon request and at seminars, meetings	Description of 15-year and other intermediate-term mortgages.
Mortgage Market Review	Lenders, Public	Produced and distributed monthly and in press kits at conferences	Review of monthly surveys and other government housing and mortgage data.
MORNET Sales Brochure MORNET Information Kit MORNET Product Sheets	Mortgage industry participants: Lender/Broker/Banker/Appraiser/Service Bureau/Title company/MI/Public	Upon request	Description of MORNET products and benefits; procedures to become a MORNET subscriber.

Name	Recipient	Timing	Description
Managing Your Mortgage Pipeline	Lenders, Public	General mailings, upon request, and at seminars, meetings	Provides a comprehensive framework for the management of interest rate risk.
Mortgage-Backed Securities (MBS) MBS Simply Illustrated Kit	Lenders, Public	Upon request and at seminars, meetings	Introductory kit on the Fannie Mae MBS that includes an explanation on how the pool's weighted average maturity can help lenders get a better price; six simple steps needed to issue an MBS; and a highlights summary of the MBS.
MBS Investments	Investors, Dealers and Traders	As requested and at seminars, meetings	Updated as new products and services are added.
Monthly Factor Tape	Investors, Dealers, Traders, Back office	Produced & distributed monthly	Provides detailed information on all Fannie Mae MBS.
Multifamily Housing for the Elderly	Lenders, Public	As requested and at seminars, meetings	Description of mortgage products and services.

Name	Recipient	Timing	Description
Multifamily Finance and Housing Initiatives	Lenders, Public	As requested and at seminars, meetings	Description of mortgage products and services.
Multifamily Mortgage-Backed Securities	Lenders, Public	As requested and at seminars, meetings	Description of mortgage products and services.
Multifamily Delegated Underwriting and Servicing (DUS)	Lenders, Public	As requested and at seminars, meetings	Description of mortgage products and services.
Newsletters/Announcements	All MORNET subscribers	As needed (8 per year)	General information on new and enhanced products and services, as well as announcements and reminders
Opening Doors to Opportunities	Prospective Lenders	Upon request and at seminars, meetings	Brochure and kit introducing lenders to profit-making opportunities when doing business with Fannie Mae. Also describes approval process.

Name	Recipient	Timing	Description
Our Participation in the FHA Reverse Mortgage Program	Lenders, Public	As requested and at seminars, meetings	Information regarding the Fannie Mae program.
Reverse Mortgages Q & A	Lenders, Public	As requested and at seminars, meetings	Questions & Answers re: Reverse Mortgages.
Pool Prefix Card	Investors, Dealers and Traders	As requested and at seminars, meetings	Used in conjunction with The ARM Source: identifies the prefix and sub-type of any pool.
Product Highlights			
One-Year Treasury-Indexed ARMS	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Three-Year Treasury-Indexed ARMS	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.

Name	Recipient	Timing	Description
Index/Yield Chart ARMS	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Cost of Funds-Indexed ARMs ARMS	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
30-Year Fixed-Rate Mortgages	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Participation Interests	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae
Energy Conservation	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.

Name	Recipient	Timing	Description
Fixed-Rate Mortgage-Backed Securities	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Adjustable-Rate Mortgage-Backed Securities	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Convertible ARM MBS	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae
Second Mortgages	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.
Rehabilitation Mortgage Loans	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae.

Name	Recipient	Timing	Description
Biweekly Mortgages	Lenders, Public	Upon request and at seminars, meetings	Description of mortgage products and services, with explanations for delivering mortgage products to Fannie Mae
Promotional Bulletins			
ARM Flex - The state-of-the-art in weighted average coupon ARM Pooling	Lenders, Public	Upon request and at seminars, meetings	Explains ARM Flex, our new standard ARM MBS program.
FRM Cash Pricing Flexibilities	Lenders, Public	Upon request and at seminars, meetings	Discusses Fannie Mae's three cash pricing alternatives for FRMs
MBS Rapid Payment Method (RPM)	Lenders, Public	Upon request and at seminars, meetings	Explains RPM, our early remittance program for MBS available to all customers

Name	Recipient	Timing	Description
LIBOR Rate Series Fact Sheet	Lenders, Public	Upon request and at seminars, meetings	Introduces the London Interbank Offered Rate, a new interest rate series created to assist lenders in developing a LIBOR-based ARM.
Pair-Offs: Fixed-Rate Mortgages	Lenders, Public	Upon request and at seminars, meetings	Describes the Pair-Off fee calculation for Fannie Mae's fixed-rate cash program.
Commercial Banks and Fannie Mae-Partners in Profit	Commercial Banks, Public	Upon request and at seminars, meetings	Discusses benefits banks can achieve by doing business with Fannie Mae.
Participation Fact Sheet	Lenders, Public	Upon request and at seminars, meetings	Discusses availability of A remittance and lower yield for fixed-rate mortgages. Discusses how to calculate participation interests.
Refinance Fact Sheet	Lenders, Public	Upon request and at seminars, meetings	Discusses Fannie Mae's streamlined refinance program.

Name	Recipient	Timing	Description
The Customer Service MBS Trading Desk	Lenders, Public	Upon request and at seminars, meetings	Describes the Customer Service Trading Desk, and explains the benefits it provides to lenders trading MBS.
Loan Stratification Service	Lenders, Public	Upon request and at seminars, meetings	Explains how this service permits customers to stratify their own portfolios for the most efficient execution.
Introducing Fannie Mae's Thrift Action Teams	Lenders, Public	Upon request and at seminars, meetings	Explains Fannie Mae's Thrift Action Teams, why they were created, and how they can assist thrifts in restructuring their assets.
7-Year Balloon Mortgage with Refinancing Option	Lenders, Public	Upon request and at seminars, meetings	Explains Fannie Mae's enhanced 7-year balloon mortgage with an option that allows borrowers meeting certain conditions to refinance with a 23-year FRM at balloon maturity.
ARM Megas	Lenders, Public	Upon request and at seminars, meetings	Explains how ARM MBS can be combined into larger pools.
Corporate Relocation Mortgages	Lenders, Public	Upon request and at seminars, meetings	Explains cash and MBS corporate relocation mortgages.

Name	Recipient	Timing	Description
Monthly COFi ARMs	Lenders, Public	Upon request and at seminars, meetings	Explains Fannie Mae's monthly costs of funds-indexed ARMs.
LASER Q & A	Lenders, Public	Upon request and at seminars, meetings	Addresses lenders' questions on the conversion to LASER Reporting.
WAC ARM MBS Pools Remitting and Reporting Dates	Lenders, Public	Upon request and at seminars, meetings	Explains the reporting and remitting cycles for WAC pools.
Investor Marketing Services	Investors, Dealers and Traders	As requested and at seminars, meetings	Provides a brief overview of MBS products and services.
Megas	Investors, Dealers and Traders	As requested and at seminars, meetings	Provides a brief overview of MBS products and services.
Treasury Indexed ARM MBS	Investors, Dealers and Traders	As requested and at seminars, meetings	Provides a brief overview of MBS products and services.
ARM Flex	Investors, Dealers and Traders	As requested and at seminars, meetings	Provides a brief overview of MBS products and services.

Name	Recipient	Timing	Description
Cost-of-Funds Indexed ARM MBS	Investors, Dealers and Traders	As requested and at seminars, meetings	Provides a brief overview of MBS products and services.
Quality Control In Loan Origination	Quality control personnel, Lenders, Public	General mailings, upon request and at seminars, meetings	Lists Fannie Mae's requirements, guidelines, and recommendations for using a quality control system to monitor loan originations.
Regional Telephone Directories	Lenders, Public	Upon request and at seminars, meetings	Information on whom to contact in Fannie Mae's regional offices.
Software Application User Kits	Fannie Mae Seller/ Servicers, service bureaus	Ad hoc/daily	Complete, detailed user documentation for each MORNET software application: MBS Call-In System, MBS Pool Submission System, Cash Delivery System, PC/LASER Reporting System, REOgram Reporting System, Loan Stratification System.
Statistical Summary of Housing and Mortgage Activities	Investors, analysts, Dealers, Public	Annually	Housing and mortgage data.
The Three-Year Rate-Capped ARM: How borrowers benefit and lenders profit	Lenders, Public	Upon request and at seminars, meetings	Brochures describing how three-year ARMs work from a lender's perspective.

Name	Recipient	Timing	Description
Underwriting I	Lenders, Public	General mailings, upon request and at seminars, meetings	Explains Fannie Mae's guidelines for underwriting credit and property, with an emphasis on the philosophy and rationale behind our policies.
Underwriting II	Lenders, Public, Underwriters	General mailings, upon request, and at seminars, meetings	Emphasizes why Fannie Mae's guidelines for underwriting credit and property exist.
Underwriting III: Risk Analysis	Lenders, Public	General mailings, upon request and at seminars, meetings	Provides the development of critical thinking skills necessary to make prudent underwriting decisions.
Underwriting Special Programs and Products with underwriters, servicers	Lenders, Public	General mailings, upon request and at seminars, meetings	Familiarizes underwriters with Fannie Mae's adjustable-rate mortgages, buydowns, and TimeSaver Plus underwriting guidelines.
Underwriting Credit	Lenders, Public, Underwriters	General mailings, upon request, and at seminars, meetings	Outlines Fannie Mae's guidelines for underwriting borrowers.

Name	Recipient	Timing	Description
Underwriting Property	Lenders, Public, Underwriters	General mailings, upon request and at seminars, meetings	Lists Fannie Mae's requirements for underwriting single-family, owner-occupied properties.
Underwriting Self-Employed	Lenders, Public, Underwriters	General mailings, upon request, and at seminars, meetings	Explains guidelines for underwriting a self-employed borrower.
Underwriting the Adjustable-Rate Mortgage: Finding the right fit for your borrower	Lenders, Public	Upon request and at seminars, meetings	General description of our ARM underwriting requirements, as well as general ARM underwriting considerations.
Welcome to Fannie Mae Brochure	Investors, analysts, Public	Upon Request	Brochure giving overview of Fannie Mae's history, current operations, financial status, automated systems, underwriting and servicing of loans, products, selling and securitizing procedures, and glossary of terms.
Welcome to a Profitable Partnership	Newly approved Lenders	Upon request and at seminars, meetings	Brochure explaining the basics of doing business with Fannie Mae and how to find more detailed information on each subject.

Name	Recipient	Timing	Description
Electronic Communications/Telephone Hotline			
Required Yields and Prices	Major wire services	Daily Weekly	Required yields and prices for various products.
MORNET Hotline	All MORNET subscribers	8:30-6:30 M-F	Information and assistance on all MORNET products and services in response to public inquiries via "800" line.
REO-Hotline	General public	As requested	Public service aimed at providing potential homebuyers with an REO property listing (1-800-553-4636).
Hotline Information services	Lenders/Borrowers/ Consumers	Daily	Telephone information re: pricing of products.
MORNET Online Bulletin Boards	All MORNET subscribers	Daily	Fannie Mae information for prices, economic news and analyses, approved condos/PUDs, settlement dates, and program announcements.

Name	Recipient	Timing	Description
News Releases			
Monthly Summary Press Release	Investors, analysts, Public	Monthly	Information relating to Fannie Mae's monthly and year-to-date activity for mortgage commitments, purchases, portfolio, debt issued and mortgage-backed securities.
Press Releases relating to financings	Newspapers, wire services	From time to time	Announcements of financings
Weekly Yield Press Release	Wire services, press, industry sources and trade associations	Weekly	Commitment and purchase volumes relating to portfolio mortgages and MBS.
Other news releases	Press, wire services, Public	As needed	To announce any important event or development, including those required to be disclosed under SEC requirements. Fannie Mae's rates, summary of REMIC issues, housing and mortgage outlook, economic trends, legislative outlook, review of mortgage report products, new products, charges to underwriting standards and corporate developments are examples of topics that merit newsreleases.

Name	Recipient	Timing	Description
Conferences and Meetings			
Industry Conferences (National and Regional)	Lenders/Bankers Brokers/Realtors	Annually, 6 conferences for bankers, 2 for lenders; quarterly for brokers, realtors and MBA	Provide MORNET demonstrations and answer questions in exhibit booth settings.
LASER User/Advisory Group and Subcommittees	Lenders	3 times/year bureaus	20-member group meets to identify problems, issues, and enhancements regarding LASER purchasing and reporting; subcommittees work with Fannie Mae representatives to define solutions.
Speeches by Fannie Mae top management personnel at Analyst Society Meetings	Securities Analysts	Periodically (7 during Jan-Nov 1989)	Financial and performance data.
Speeches by Fannie Mae top management personnel at Analyst Presentations	Securities Analysts	Periodically (40 during Jan-Dec 1989)	Financial and Performance Data.

Name	Recipient	Timing	Description
Single-Family Marketing Conferences or Seminars	Members and selected Fannie Mae staff	Estimated 16 in 1990	Panel presentations, distribution of appropriate literature, and/or guest speakers constitute Fannie Mae's presence at these conferences. This list of conferences is generally the same, year to year.
Multifamily Housing Conferences or Seminars	Lenders, Investors, Builders, mortgage bankers, officials of Regional Federal Reserve Banks and Federal Home Loan Banks; press	3 per month	Includes presentations by Multifamily staff from the home office about the performance and advantages of the various multifamily products. A booth is available at some conferences for distribution of brochures, literature and to answer questions.
MBS Investor conferences	Investors	Approximately 12 per year	Includes presentations by MBS employees from the Home & Regional offices about the performance and advantages of MBS; workshops are provided on legislative and regulatory issues that affect the market, portfolio management, product development, and current market information.

Name	Recipient	Timing	Description
HUD Briefings by Senior Management	HUD	From time to time	Fannie Mae's business plan, business practices, the company's capitalization, waiver of book-entry requirements, hedging practices and foreign currency transactions.
Congressional Testimony by Senior Management	Members of Congress	From time to time	Presentations of written and oral statements on issues affecting Fannie Mae or the mortgage industry.
Congressional Briefings	Staff of the Congress	From time to time	Briefings to inform Hill staff of Corporation's activities.
Meetings with Investors Throughout U.S. and Overseas	Market Analysts, Investors	Approx. 400 per year	Oral presentations by senior management describing Fannie Mae, its business and securities.
Press Events for initiatives negotiated by the Office of Low- and Moderate-Income Housing	Press; transaction partners; public officials; other interested parties	Averages two per month for the Office	Participation in press events (groundbreaking and opening ceremonies) for transactions in which Fannie Mae has invested.

Name	Recipient	Timing	Description
The Fannie Mae Foundation			
Annual Report	Foundation grantees, Public	Annually	All Foundation grants made during the report year and audited financial statements of the Foundation.
Application Brochure	Prospective grantees	Upon request	Application for Foundation grants.
Awards of Excellence for Low-Income Housing Production Application Package	Prospective grantees, participants in low-income housing programs	Upon request	Annual Awards Program.

Senator CRANSTON. Leland. Please try to be brief, so that we can get to the roundtable.

STATEMENT OF LELAND C. BRENDSEL, PRESIDENT AND CEO, FEDERAL HOME LOAN MORTGAGE CORPORATION, WASHINGTON, DC

Mr. BRENDSEL. Thank you, Mr. Chairman.

My name is Leland Brendsel, and I am chairman and CEO of Freddie Mac. I welcome the opportunity to appear before you today to discuss our financial soundness and capital adequacy.

This subcommittee has devoted much time and effort to searching for ways to make housing more affordable. We have focused on the fact that housing is integral to family life.

When Freddie Mac was created 20 years ago, you were directed by Congress to increase the availability and affordability of conventional mortgages for American homebuyers. Freddie Mac has carried out this mission, without Federal appropriations or budget authority. And with your strong support, Freddie Mac has also consistently carried out our mandate in a fiscally prudent manner, financing one in eight American homes and 600,000 apartment units nationwide.

Last summer, Congress amended our charter to strengthen our ability to meet the changing demands of housing finance. FIRREA also reemphasized the importance of adequate capital in preserving a stable lending environment. I believe a safe and sound, stable secondary market is absolutely critical to financing housing in this nation.

Some would have you believe that Government sponsored enterprises are like a mushroom cloud hanging over the American taxpayer, an accident waiting to happen. It is true that Freddie Mac stands behind over $280 billion in obligations. One very important fact, though, that is frequently forgotten is that those $280 billion in mortgage-backed securities are backed by American homes worth twice that amount.

In other words, we purchased a mortgage years back of $80,000. It is probably backed by a home worth $150,000 today. Equity in a person's home is the single most important factor in determining whether or not there will be a loss on any mortgage. No home owner wants to default on a mortgage loan.

For Freddie Mac to ever become a liability to the Federal Government, the equity in your home, the equity in the $500 billion of other homes securing our mortgages would have to erode, and our loan loss reserves and other stockholder equity would all have to be exhausted. This would take an economic catastrophe like the Great Depression.

Because we hold enough capital to survive the Great Depression, to raise additional capital would unnecessarily increase our costs. And these costs would result in higher mortgage rates, which would be borne, ultimately, by customers, homebuyers.

We should not be compared to a bank or thrift. The only similarity between Freddie Mac and thrifts or banks is that we both finance home mortgages. But unlike some institutions, Freddie Mac is committed to one line of business, the purchase of high-quality residential mortgages. We do not take deposits, we do not make loans to businesses, we do not make loans on office buildings. We cannot expand into riskier lines of business, we are precluded by law. And unlike thrifts, we take no interest rate risk. Our credit risk is diversified across the Nation, in all 50 States. A downturn of the economy in one region is offset by strengths in the other.

In fact, Freddie Mac lives in a fish bowl; we are evaluated by investment analysts, audited by GAO and by independent public accountants, chartered by Congress, regulated by HUD. Changes in Freddie Mac's business strategies are known to the public almost immediately. New business lines require congressional approval. There is only one Freddie Mac, and we are highly visible.

Now, I know it is difficult to accept assurances of safety and soundness; you have heard them before, years before, from other quarters. And I am not going to tell you or ask you to trust me today alone. You have heard that from others much longer than you have heard it from me.

I will tell you that I have been preoccupied with capital adequacy for some time before it became of interest. In fact, we retained Dr. McConnell, Dr. Flannery, here today, long before the Congressional focus on the Government-chartered enterprises began, to review our own analysis of our capital adequacy.

In fact, I believe we have some of the best staff at Freddie Mac in the Nation, understanding mortgage loan defaults and credit risk. But to confirm that, we also involve outside experts as well.

More recently, when the issue arose last year, I commissioned Price Waterhouse to conduct an independent evaluation of Freddie Mac. In fact, Fred Wolf is here today. They of course have had much experience in the past evaluating FHA.

To summarize, Mr. Chairman, Freddie Mac is able to meet its obligations, even if the entire country faces a serious depression. We also have a track record of 20 consecutive years of profitability. We were successful during the spiraling inflation and high interest rates of the 1970's, we prospered during the recession and energy bust of the 1980's. We are prepared for the 1990's and whatever they may bring.

Thank you for this opportunity to address you today. I look forward to answering any questions.

Senator CRANSTON. Thank you a great deal.

[The complete prepared statement of Leland C. Brendsel follows:]

STATEMENT OF

LELAND C. BRENDSEL
CHAIRMAN AND CHIEF EXECUTIVE OFFICER

FREDDIE MAC

BEFORE THE

COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS

SUBCOMMITTEE ON HOUSING AND URBAN AFFAIRS

U.S. SENATE

FEBRUARY 7, 1990

Mr. Chairman and Members of the Subcommittee. My name is Leland Brendsel and I am Chairman and Chief Executive Officer of the Federal Home Loan Mortgage Corporation, better known as Freddie Mac. I welcome the opportunity to appear before you today to discuss the financial soundness and capital adequacy of Freddie Mac.

This Subcommittee has devoted a considerable amount of time and effort in search of ways to make housing more affordable. It has recognized that housing is integral to the family's life, relationships and self image. When Freddie Mac was created twenty years ago, we were directed by Congress to increase the availability and affordability of conventional mortgage funds for homebuyers. Freddie Mac has successfully carried out this congressional mission without Federal appropriations, budget authority or taxpayer dollars.

Freddie Mac must balance two competing goals: to serve our housing mission while protecting the Federal government from risks arising from our operations. I believe that we can accomplish both of these goals.

With your strong support, Freddie Mac has consistently carried out our mandate in a fiscally prudent manner. You have amended our charter to allow us to meet the changing demands of the housing finance marketplace. You have protected the mortgage finance industry from burdensome proposals and unnecessary costs for homebuyers. At the same time, we have provided affordable mortgage financing for over million eight American homes and 600,000 rental units.

The passage of the Financial Institutions Reform, Recovery and Enforcement Act of 1989, or "FIRREA," re-emphasized the importance of adequate capital in preserving a stable lending environment. Managing our risks and maintaining appropriate capital for those risks are essential strategies to fulfilling our statutory mission. More capital would provide more protection against risks, but excess capital would unnecessarily increase housing costs. These increased costs will be borne by the nation's homebuyers.

To put Freddie Mac's overall risk posture in perspective, Freddie Mac does stand behind $280 billion in mortgage-backed securities we have issued, but there is twice that amount in American homes to support those loans. That $280 billion is supported by $500 billion in homes owned by one out of eight American homeowners. For Freddie Mac to become a liability to the Federal government, that $500 billion, our loan loss reserves and our stockholder equity must be first must be exhausted. This would take an economic catastrophe worse than the Great Depression.

I assure this Committee that Freddie Mac is well capitalized and is prepared to meet is obligations, now and in the future, even under the most severe economic conditions.

OVERVIEW

Our business is very simple. We purchase loans on residential property from lenders nationwide, package these mortgages into pools, and sell securities backed by these home loans. By selling the mortgage-backed security we avoid any interest rate risk.

Recently, comparisons have been drawn between Freddie Mac and the thrift industry, particularly with regard to the determination of an appropriate capital level. Policy makers appear to be reaching for an obvious and simple solution: to apply the capital standards now employed for banks and thrifts to Freddie Mac. I urge the Members of this Committee to consider the purposes for the risk-based capital system and the industry that the risk-based capital rules are designed to regulate.

Freddie Mac is not a bank or a thrift. We do not take deposits. We cannot make loans for business or commercial purposes. We cannot make loans for see-through office buildings. We cannot expand into riskier lines of business. Unlike such institutions, Freddie Mac is limited to one line of business - the purchase of high-quality residential loans. These types of loans were not responsible for the problems in the thrift industry. In its simplest terms, we issue securities backed by residential mortgages held in trust.

There are approximately 14,000 banks and 3,000 thrifts. The task of regulating 17,000 lenders spread across the nation is much more difficult than regulating Freddie Mac.

In many respects, Freddie Mac lives in a fishbowl. We are scrutinized by Congress, regulated by HUD, overseen by the Treasury Department, audited by GAO, and examined by investment analysts. Freddie Mac is not able to change its business strategies without attracting the attention of Congress, the Administration and Wall Street. There is only one Freddie Mac and we are highly visible and closely examined.

AVOIDING INTEREST RATE RISK

The mortgage business involves two types of risks: interest rate risk and credit (or default) risk. Since our inception, Freddie Mac has had a single strategy of avoiding interest rate risk and controlling credit risk. It is a strategy that worked well for my predecessors and one to which I remain committed.

Interest rate risk occurs when the value of assets reacts differently than the value of liabilities when interest rates change. When Freddie Mac designed its first mortgage-backed security we started a tradition which has become the core of our business strategy. By creating a security that "passes-through" principal and interest when received, the interest rate risk is passed on to the investor in the security. Freddie Mac finances 95 percent of its mortgage purchases in this fashion, with the remainder representing new products awaiting securitization. Our system of matching our assets and liabilities is a major difference between Freddie Mac and portfolio lenders, such as thrifts, who borrowed short term funds to make long term loans.

By immediately selling securities when we purchase the mortgages, the corporation is insulated from even short-run swings in interest rates. Currently, the mortgages we purchase in the morning are sold that afternoon. In essence, Freddie Mac incurs no interest rate risk. Our emphasis on securitization allows Freddie Mac to focus on credit risk management.

CONTROLLING DEFAULT RISK

Credit risk can be defined as the risk that the loans we purchase will default. Essentially, Freddie Mac ultimately guarantees the mortgages underlying the securities we sell. The ratio between the loan amount and the value of the underlying property (loan-to-value ratio) is a key factor in determining the risk level of a loan. The greater the equity in the property, the lower the loan-to-value ratio, the safer the loan is. Currently, the loan-to-value ratio of Freddie Mac's entire portfolio is approximately 55 percent. Stated another way, the homes actually backing our securities are worth twice as much as the mortgages on them.

To manage our credit risk, we have established several "layers of protection" to ensure Freddie Mac, and therefore the Government, is insulated from any cost associated with our mission. All five layers are protections against the need to draw on Freddie Mac's capital. And all of our capital would have to be drawn before the Federal government would have any exposure.

The first layer of protection is the borrower. American homeowners pay their mortgages before other obligations and are highly motivated to keep their homes. Just as no homeowner wants to lose his or her home, no lender wants to own it by default. In cases where borrowers get behind on their payments, we require that lenders who service our mortgages work with those borrowers, counseling them on how to keep their homes if at all possible. As a result, 75 percent of homeowners who default on a mortgage payment ultimately become current.

A second layer of protection is our underwriting, quality control and servicing criteria. Adequate underwriting ensures that borrowers can repay their mortgage, the property value supports the mortgage and legal documentation is in order. Our quality control system is in place to ensure that the underwriting criteria are met. Finally, our servicing requirements ensure that when a problem arises after the mortgage is purchased, it is identified and resolved early. This layer of protection results in one of the lowest default rates in the industry: one and a half loans out of 1,000.

A third layer of protection is the quality of our lenders. Freddie Mac purchases investment quality mortgages on a contractual basis with the lender. If that lender makes a loan which violates our contractual agreement, that lender is required to repurchase the loan from Freddie Mac.

The fourth layer of protection involves the credit enhancements we require. The amount of equity in the home is the chief determinant of default risk. But, we realize that not everyone has a 20 percent downpayment for the purchase of their home. In order to permit these borrowers the benefits of the secondary market, other credit enhancements - such as private mortgage insurance, collateral and recourse - are used. As a result, loans which exceed 80 percent of the property's value are credit enhanced in some fashion, thereby insulating Freddie Mac further. As noted earlier, the loan to value ratio of our entire portfolio is approximately 55 percent.

The geographic diversity of the loans we have purchased is the fifth layer of protection. Our national base of operations insulates Freddie Mac from regional economic fluctuations. This is an important distinction between Freddie Mac and most depository institutions. Because we buy loans in every state, we are not subject to the economic conditions of a single region. Being in diverse markets means that when one area of the country, like the Southwest, experiences severe economic distress, our business in other regions serves as a buffer. Our actual experience in Texas in the 1980s demonstrated the effectiveness of geographic diversification. This geographic diversity significantly reduces the chance that we will need to draw on our capital because it is very unlikely that a nationwide depression will occur.

Geographic diversity also means that when purely private firms abandon a market, Freddie Mac does not. We ensure that a continuous supply of mortgage funds is available for investment quality mortgages, whether those mortgages are needed by newcomers to that area who want to be homeowners, or existing homebuyers who need to refinance their loans.

HIGH VISIBILITY

In addition to these layers of protection against risk, Freddie Mac is a highly visible company, with many layers of external and internal oversight. This high level of visibility acts to prevent Freddie Mac from taking excessive risks or improperly leveraging our Federal charter. The external oversight begins with Congress. Because of our charter, we cannot enter any new lines of business without prior congressional approval.

In the case of the secondary mortgage market, there are only two entities to be monitored. Both are restricted to the business of residential mortgages. This is a much simpler regulatory task than regulating 17,000 thousand depository institutions. The GSEs have extensive reporting responsibilities. Freddie Mac must file 10 different substantive reports to Congress and other government agencies on a monthly, quarterly or yearly basis. We also have several reports and disclosure statements that we make to the public on a regular basis. I have attached a list of these reports to this statement.

External oversight extends to the Departments of Housing and Urban Development (HUD) and the Treasury. As of August 9, 1989, HUD was granted general regulatory control over all Freddie Mac's operations, including mortgage purchase and securities sales programs, underwriting standards, capital standards, and dividend policies. At the same time, the Treasury Department was granted preapproval authority over all Freddie Mac's financings.

Because Freddie Mac finances all of its operations from public and institutional investors, our risks and profitability are subject to significant scrutiny by private investor analysts in the form of periodic investor reports. Any change in Freddie Mac's business strategy or condition would be noted immediately.

In addition, Freddie Mac has always been subject to audits by GAO and an independent public accounting firm. Both recently conducted audits which we passed with flying colors.

Freddie Mac also has significant internal controls. Internal scrutiny starts at the top. When Congress expanded Freddie Mac's Board of Directors to an 18 member Board to reflect its public stockholders, it included five Presidentially-appointed members. This Board has a fiduciary responsibility to ensure the safety of Freddie Mac's operations. We also have in place an internal auditing function, which reports directly to the Board of Directors. Because of their inherent interest in the success of the corporation, our shareholders act as yet another internal control over the quality of our management.

The GSEs are few and highly visible. The key to the effective regulation of them is obtaining timely and accurate information in order for the regulator to get an accurate assessment of the current operations, risk posture and capital level of the GSE. Any changes in the risk level, the capital level or general health of the corporation would be easily detected. The challenge is to generate the essential information about the GSEs without creating a burdensome reporting process.

Because there are so few GSEs, each with a special mission, it is appropriate that each GSE be evaluated individually, and that the proper level of capital be determined based on its true level of risks. The use of a generic standard to monitor a unique institution would interfere with the mission of the GSE and may or may not provide the necessary level of protection for the Federal government.

ADEQUATE CAPITAL

No simple capital ratio or formula can provide an accurate assessment the adequacy of our capital or the risks we face. The proper level of capital for Freddie Mac is determined by evaluating its risks, the likelihood of adverse economic conditions occurring, the impact of those conditions on our operations, and the severity of the losses caused by those conditions.

In the most basic terms, capital is the difference between assets and liabilities. The best test of capital adequacy is whether an institution has enough capital to continue under the most disastrous economic conditions. To determine the adequacy of our capital, Freddie Mac creates an economic model of the corporation's assets and liabilities and then subjects the company to a worst case scenario. In this model, house prices fall drastically, interest rates fall to half their current levels, and Freddie Mac generates no new business for a period of 10 years. This is like the experience of the Great Depression and is significantly worse than the experience in Texas in this decade.

We have also been tested by the actual experience of the Southwest and the interest rate volatility of the early eighties. Given the quality of our assets and the nature of our risks, our market value capital base of $5.0 billion is more than adequate to withstand extreme nationwide economic distress.

In addition to subjecting Freddie Mac to these stress tests, we have recently reported our balance sheet on a market value basis. This differs from the traditional historical cost financial statements because our assets and liabilities are valued under current market conditions. This is a very useful tool for any financial institution because it provides an assessment of the institution's assets and liabilities at their fair market value. A copy of our Market Value Balance Sheet is attached.

We take a further step and subject this market value balance sheet to interest rate shocks to determine the impact of interest rate swings. This provides us with information concerning our net worth if interest rates increased or decreased by four percentage points. Such current information concerning our financial viability, today as well as under different environments, is extremely valuable to the management of the corporation and to regulators.

TO RAISE MORE CAPITAL

Freddie Mac's mission is to provide an efficient mechanism to tap the capital markets for the benefit of the home mortgage market. To raise additional unnecessary capital would increase Freddie Mac's costs. These costs would eventually result in higher mortgage rates which would be borne by our ultimate customer, the homebuyer. Raising more capital in order that Freddie Mac pose even less of a risk to the U.S. Treasury unnecessarily raises the cost of mortgage funds.

Everyday Freddie Mac faces two competing goals. There is pressure to increase capital and reduce our overall risks in order to ensure that the Federal government is overprotected. On the other side, we play an important role in meeting the housing needs of America. We are pressed to change our standards to help homebuyers who do not meet the current lending qualifications. Freddie Mac's challenge is to balance the need for greater homeownership opportunities against the inherent risk associated with mortgage lending, with the overriding goal of conducting its business in a safe, sound manner.

I welcome the debate of this issue. It has given us the opportunity to re-examine our risks and operations. The teams from GAO and the Treasury Department have been very thorough and challenging. I look forward to reviewing their reports.

Freddie Mac was created to provide an efficient mechanism to tap the capital markets for the benefit of homebuyers. Our principal function is to substitute Freddie Mac's credit status for that of the homebuyer. This makes mortgages more attractive as investments. Our efficiency plus our Federal charter allow us to save the homebuyer approximately one half of a percentage point on the cost of a home mortgage. This is a substantial savings over the life of a mortgage. More importantly, it enables more Americans to achieve the dream of owning their home.

We accomplish our mission in a prudent business-like manner. We measure our risks and we constantly monitor our strategies to manage those risks. We are constantly seeking ways to be more efficient and to serve our housing mission better.

I assure this Committee that Freddie Mac is able to meet its current obligations as well as any obligations that may arise, even if the country faces an economic catastrophe. We have a track record of 20 consecutive years of profitability. We were successful during the spiraling inflation and high interest rates of the 1970s. We prospered during the recession and energy bust of the 1980s. We are prepared for the 1990s and whatever they may bring.

Thank you for this opportunity to address this important issue. I will be glad to answer any questions you may have.

Supplement dated December 11, 1989 to
Information Statement dated March 31, 1989

Freddie
Mac

Federal Home Loan Mortgage Corporation

CONSOLIDATED MARKET VALUE BALANCE SHEET AS OF SEPTEMBER 30, 1989

(unaudited)

The Consolidated Market Value Balance Sheet (unaudited) of the Federal Home Loan Mortgage Corporation ("Freddie Mac") and accompanying notes are presented below. Market value information is used internally by Freddie Mac for planning, asset and liability management, interest rate risk management, simulations, and in measuring the economic impact of transactions. Currently, there are no generally accepted accounting principles ("GAAP") applicable to market value based financial disclosures. This presentational format is an initial attempt to disclose market value information in the most useful and relevant form. Freddie Mac understands that there will be divergent views regarding presentational standards for market value accounting. As these standards evolve and become generally accepted, readers and users of financial information should derive significant benefit from market value disclosures. Freddie Mac intends to refine and improve its presentation of market value information and will continue to strive for the best possible disclosure format and methodology.

FEDERAL HOME LOAN MORTGAGE CORPORATION
CONSOLIDATED MARKET VALUE BALANCE SHEET
AS OF SEPTEMBER 30, 1989

(unaudited)

	Book Value(a)	Market Value(a)
	(dollars in millions)	
Assets		
Mortgages:		
Mortgages without prepayable financing	$ 12,900	$13,000
Mortgages with matching prepayable financing:		
Mortgages backing multiclass debt securities:		
CMO/MCF mortgages	3,200	3,100
Mortgages backing multiclass PCs with MPOs	2,700	2,700(b)
Multifamily plan B mortgages	1,300	1,300
ARMs without interest rate caps	500	500
Less—Unamortized mortgage purchase discount, fees, and other related items	(400)	n/a
Less—Reserve for loan losses	(100)	(100)
Total mortgages	20,100	20,500
Cash and investments	6,300	6,300
Reverse repurchase agreements	6,500	6,500
Accounts receivable and other assets	1,600	1,600
Unamortized mortgage sales discount, fees and other related items	1,000	n/a
Real estate owned	300	300
Off balance sheet items:		
Contingencies:		
PCs and GMCs	257,900	n/a
Less—Underlying mortgages sold	(257,900)	n/a
Servicing on pass-through financed mortgages	n/a	3,600
Outstanding commitments to purchase mortgages	n/a	100
Total assets	$ 35,800	$38,900
Liabilities		
Debt securities:		
Obligations for mortgages with matching prepayable financing:		
Multiclass debt securities:		
CMO/MCF debt securities	$ 2,800	$ 2,400
Multiclass PCs with MPOs	2,700	2,700(b)
Callable debt funding multifamily plan B mortgages	500	500
Notes funding ARMs without interest rate caps	500	500
Other notes and bonds	18,100	18,100
Total debt securities	24,600	24,200
Principal and interest due to PC investors	6,400	6,400
Other liabilities	500	500
Reserve for uninsured principal losses on sold mortgages	300	300
Subordinated borrowings:		
Callable debt funding multifamily plan B mortgages	800	800
Other subordinated borrowings	1,400	1,700
Total liabilities	$ 34,000	$33,900
Stockholders' equity	$ 1,800(c)	n/a
Net market value	n/a	$ 5,000(c)(d)
Total liabilities and net values	$ 35,800	$38,900

(a) Market values have been estimated, and book values rounded, to the nearest $100 million.

(b) The market value of PC servicing is included in "Servicing on pass-through financed mortgages." Book values inserted to create offsetting assets and liabilities.

(c) Includes nonvoting common stock, callable at aggregate par value of $100 million.

(d) Excludes economic value of any tax liabilities (see "Limitations" below).

n/a Not applicable.

See accompanying notes to Consolidated Market Value Balance Sheet.

NOTES TO CONSOLIDATED MARKET VALUE BALANCE SHEET

The Consolidated Market Value Balance Sheet presents Freddie Mac's estimate of the market value of the corporation's assets, liabilities, and rights to future cash flows (see "Limitations" below) as of September 30, 1989. This estimate is sometimes referred to as the Mark-to-Market ("MTM").

Highlights

There are three major balance sheet components that are interest-rate sensitive and are therefore subject to substantial differences between book and market values. These are "Mortgages," long-term debt securities included in "Other notes and bonds" and "Subordinated borrowings," and "Servicing on pass-through financed mortgages." As of September 30, 1989, the weighted average coupon of the mortgage portfolio was at a small premium over the prevailing current coupon. Therefore, the market value for mortgages is slightly higher than the corresponding book value. Similarly, since the weighted average coupon on "Other notes and bonds" was approximately the same as existing market borrowing costs, the rounded market and book values for this item are equal. The difference in the market and book values of "Other subordinated borrowings" is primarily the result of outstanding zero coupon debentures which were issued at substantially higher than current rates. The difference between book and market values for "Servicing on pass-through financed mortgages" exists because the market value of servicing is not carried on the historical cost balance sheet, and is the largest valuation difference between the two methodologies.

Limitations

The present MTM does not attempt to estimate a value for all items which may be reflected in the aggregate market value of Freddie Mac's common stock. Specifically, the current analysis ignores the going-concern value of the firm as implied by the present value of all future business opportunities. The value of future business is obviously a significant component of the total value of the firm. However, the present value of future business opportunities is extremely difficult to estimate, and has not been included in the MTM.

These estimates of market values also do not include the impact of income taxes. A simplified approach for the inclusion of taxes in the analysis would be to estimate taxes as if an actual liquidation at market values had occurred. This would be done by calculating the tax on the market value equity in excess of book value equity. The estimated market value equity is approximately $3.2 billion in excess of book value equity. Assuming a maximum marginal tax rate of 34%, the tax on this excess would be $1.1 billion. Thus, the market value equity would be reduced from the pre-tax amount of $5.0 billion shown in the MTM to an after-tax market value equity of approximately $3.9 billion. This method of analysis, however, has significant shortcomings. It ignores the timing and discounting of actual tax payments and greatly oversimplifies the provisions of the tax code that would apply to determine taxable income.

Freddie Mac expects to improve its MTM valuation methodology as resources and technology permit. Freddie Mac has generally used currently available financial market prices to value aggregate on- and off-balance sheet items. A number of prices, however, have been interpolated using generally accepted valuation techniques. Freddie Mac intends to calculate market values using methodologies consistent between periods. However, certain calculations may be refined or improved in future presentations as Freddie Mac improves upon the available estimating techniques in its efforts to obtain and present the most relevant market value information.

1. PRESENTATION CONSIDERATIONS AND ACCOUNTING POLICIES

The book values included in the Consolidated Market Value Balance Sheet are prepared in accordance with GAAP, which is based on the Historical Cost valuation approach and therefore generally ignores temporary fluctuations in market values. Historical Cost and Market Value reporting have numerous significant reporting differences and the two are therefore often incompatible. The following discussion summarizes some of the most significant presentation differences between Freddie Mac's GAAP and Market Value balance sheets.

Reporting of Unamortized Deferred Items

Generally, deferred items account for the timing difference between cash transactions and book income recognition. For book purposes, these deferred items are usually amortized to income or expense over the life of the related asset or liability. However, market values for MTM purposes are calculated based upon the present value of estimated future cash flows. Any benefit or cost associated with a deferred item is embedded in the estimated future cash flows of the related asset or liability. (For example, Freddie Mac expects to recover sales discounts on mortgage-related securities from larger servicing spreads on the associated mortgages.) Therefore, the economic effects of unamortized discounts, premiums, and other deferred items are not presented separately in the Consolidated Market Value Balance Sheet; rather, these items are included in the valuation of the related asset or liability.

Matched Financing with Prepayable Debt

Unlike other Freddie Mac financial disclosures, MTM disclosure separately identifies mortgages that are matched financed (i.e., financed with debt securities having payment characteristics substantially identical to those of the related mortgages). Two items are shown: "Multifamily plan B mortgages" with prepayment lockouts that are financed with debt callable by Freddie Mac when the lockouts expire, and "ARMs without interest rate caps" that are financed with short-term debt.

Asset Sales and Transfers of Receivables with Recourse

Freddie Mac sells single-class Mortgage Participation Certificates ("PCs") and has sold Guaranteed Mortgage Certificates ("GMCs"), representing undivided interests in primarily conventional mortgages. In conjunction with these programs, Freddie Mac makes certain payment guarantees to the investors. These guarantees include: (1) the timely payment of interest at the PC and GMC certificate rate, (2) the timely payment of principal on mortgages underlying certain PCs, (3) the ultimate collection and payment of principal on mortgages underlying all PCs, and (4) the payment of principal on GMCs in accordance with a specified minimum schedule. For book reporting purposes these transactions are recorded as sales of assets in accordance with Statement of Financial Accounting Standards ("SFAS") No. 77, "Reporting by Transferors for Transfers of Receivables with Recourse," and are removed from the balance sheet. To reflect the guarantees made by Freddie Mac, the remaining outstanding balances of the PCs and GMCs and the corresponding undivided interests in the underlying mortgages are presented as contingencies in the GAAP balance sheet. Freddie Mac receives a higher interest rate on its purchased mortgages than it passes through to holders of the corresponding mortgage-related securities. The market value of this spread or servicing fee, net of costs (including the administrative expenses of performing the servicing function but excluding the cost of credit losses, which are reflected in the reserve accounts), is included on the Consolidated Market Value Balance Sheet in the "Servicing on pass-through financed mortgages" line item.

Freddie Mac also sells Multiclass PCs, each series representing beneficial ownership interests in specific pools of single-class PCs and Giant PCs. For book reporting purposes, the Multiclass PCs are treated as sales of assets. The market value of the servicing fee related to the underlying PCs is included in the Consolidated Market Value Balance Sheet in the "Servicing on pass-through financed mortgages" line item. However, several classes of certain series of Multiclass PCs have been sold with a mandatory purchase obligation ("MPO") that entitles the holder to a one-time option to exercise a put on the securities to Freddie Mac, at par, on a specified date. Because of the existence of the MPO, these Multiclass PCs do not meet the requirements for sale treatment under SFAS No. 77. Because cash flows from the "Mortgages backing multiclass PCs with MPOs" equal the cash flows paid to security holders, changes in these cash flows do not impact the "Net market value." Therefore both the securities and the underlying mortgages are carried at their book values. The market value of the servicing fee on the single-class PCs underlying the Multiclass PCs with MPOs is included in the Consolidated Market Value Balance Sheet in the "Servicing on pass-through financed mortgages" line item, and the negligible value of the MPO is deducted from that value.

Freddie Mac has also sold Collateralized Mortgage Obligations ("CMOs") and a Mortgage Cash Flow Obligation ("MCF"). Each series of the CMOs is secured by, and the MCF is based upon, a single pool of conventional mortgages. Under GAAP, CMOs and MCFs are collateralized borrowings and are therefore presented as debt financings in accordance with Financial Accounting Standards Board Technical Bulletin No. 85-2, "Accounting for Collateralized Mortgage Obligations." The estimated value of the mortgages underlying the CMOs and the MCF is shown in the "CMO/MCF mortgages" line. Freddie Mac has two types of interests in these securities: (1) retained classes and (2) retained residuals. The "CMO/MCF debt securities" item is the value of the underlying mortgages less the value of these two interests.

Outstanding Commitments to Purchase Mortgages

Freddie Mac enters into two primary types of non-optional mortgage purchase commitments. Mandatory commitments, where price and terms are agreed upon, almost always result in a purchase. The value of these commitments is estimated as the market value of the expected servicing fee. Mandatory master commitments, where price has not been agreed upon, have a higher percentage of cases where the mortgage purchase is not completed. In such cases the seller is charged a pair-off fee. The market value of master commitments is estimated to be the aggregate amount of the related pair-off fees. (Optional mortgage purchase commitments are excluded from the MTM valuation.)

2. SIGNIFICANT MARKET VALUATION METHODOLOGIES AND ASSUMPTIONS

The following discussion summarizes the significant methodologies and assumptions used in estimating the market values presented in the accompanying Consolidated Market Value Balance Sheet.

Mortgage-Related and Debt Valuations

Freddie Mac uses market quotations as its benchmark for estimating the market value of most of its mortgage-related and debt securities. Market quotes for Interest Only (IO) strips are used to value the servicing on sold mortgages. Estimates of market prices for coupons and maturities for which market quotes are not readily available are obtained by interpolation, using Option Adjusted Spread ("OAS") models applied to aggregate balances by mortgage type, coupon, and maturity. This interpolation technique is used for "Mortgages without prepayable financing," "Multifamily plan B mortgages," "ARMs without interest rate caps," "Callable debt funding multifamily plan B mortgages," "Notes funding ARMs without interest rate caps," long-term payables included in "Other notes and bonds," "Subordinated borrowings," "Servicing on pass-through financed mortgages," and "Outstanding commitments to purchase mortgages." Freddie Mac uses a deterministic model to estimate the market value of "CMO/MCF mortgages" and "CMO/MCF debt securities." Deterministic and OAS-based models can generally be used interchangeably for MTM purposes without providing significantly different results, because they are both based upon market values.

Assets and Liabilities with Short-Term Maturities

The market values of relatively liquid short-term assets and liabilities not otherwise valued in the MTM are assumed to be equal to their book values. These assets and liabilities are "Cash and investments," "Reverse repurchase agreements," "Accounts receivable and other assets," "Real estate owned," "Principal and interest due to PC investors," short-term payables included in "Other notes and bonds," "Other liabilities," "Reserve for loan losses" and "Reserve for uninsured principal losses on sold mortgages."

3. TRANSITION ANALYSIS

The MTM Transition Analysis shows the individual impact of some of the factors affecting the MTM. It specifically focuses on changes to the MTM from the previous quarter due to technical enhancements, interest rate/price changes, and changes in the portfolio.

Technical Enhancements

The Transition Analysis first restates the previous quarter's MTM estimates to reflect technical enhancements of the estimation models or procedures. Since this is Freddie Mac's first MTM disclosure, there are no changes due to technical enhancements. However, it is expected that there will be future model and estimation enhancements that will require a restatement of previous quarter results in order to make quarter-to-quarter information comparable.

Interest Rate/Price Changes

Quarter-to-quarter changes due to interest rate shifts are estimated by comparing the previous quarter's MTM with a recalculated previous quarter MTM estimate using the current quarter's prices applied to previous quarter's balances. During the third quarter of 1989, as the result of an increase in interest rates, mortgage values decreased, and servicing values increased. The overall impact was an increase of approximately $90 million.

Portfolio Changes

The impact on the MTM due to portfolio changes (i.e., operations) is estimated as all changes not due to interest rate/price movements or portfolio runoff. The MTM increased approximately $280 million due to portfolio changes. The detail of the transition analysis below shows the market value changes in the balance sheet and in servicing, based on current quarter interest rates and prices.

MARK-TO-MARKET TRANSITION ANALYSIS
FROM JUNE 30, 1989 TO SEPTEMBER 30, 1989

in $MM (rounded to nearest $10 million)	JUN 30	RATE/PRICE IMPACT	RUNOFF IMPACT	PORTFOLIO CHG IMPACT	SEP 30
NET MARKET VALUE	$4,700	$90	($70)	$280	$5,000
1. ASSETS:	36,340	40	(730)	$3,290	38,940
A. Mortgage-related:	20,300	(80)	(640)	$970	20,550
—Mortgages held for investment/sale	14,320	(60)	(480)	990	14,770
—CMO/MCF mortgages	3,320	(20)	(130)	(20)	3,150
—Multiclass PCs with MPOs	2,770		(30)		2,740
—Reserve for loan losses	(110)				(110)
B. Non mortgage-related:	12,610	—	—	2,110	14,720
—Cash and investments	2,500			3,750	6,250
—Reverse repos	8,000			(1,440)	6,560
—Receivables	1,810			(220)	1,590
—Real estate owned	300			20	320
C. Off balance sheet	3,430	120	(90)	210	3,670
—Cash PCs	1,840	70	(50)	40	1,900
—Guarantor PCs	1,530	50	(40)	140	1,680
—Outstanding purchase commitments	60			30	90
2. LIABILITIES:	31,640	(50)	(660)	3,010	33,940
—CMO/MCF debt securities	2,590	(20)	(120)	(20)	2,430
—Multiclass PCs with MPOs	2,770		(30)		2,740
—Short-term debt	16,000		(510)	1,530	17,020
—P&I due to PC investors	5,250			1,100	6,350
—Other liabilities	610			(90)	520
—Reserve for principal losses	310			10	320
—Long-term debt	4,110	(30)		480	4,560

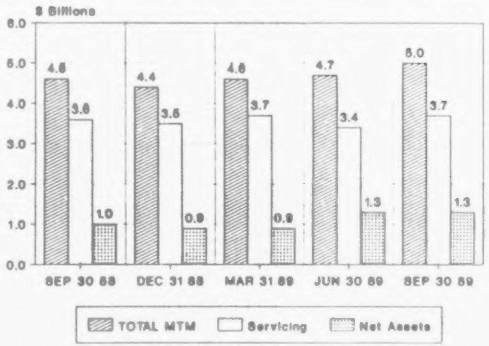
4. HISTORICAL ANALYSIS

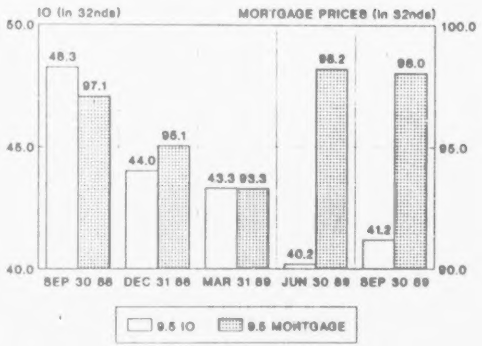
The MTM Historical Analysis provides a comparison of the MTM and of the prices for mortgages and IO strips for the previous five quarters.

The decrease in the MTM between the third and fourth quarters of 1988, as presented in the first bar chart below, was due primarily to falling prices for IO strips, which is the basis for marking the value of servicing to market. Normally there is an inverse relationship between mortgage prices and IO prices. However, during fourth quarter 1988 and first quarter 1989, IO prices did not move inversely to mortgage prices. The second bar chart shows the historical price movement of 9.5% coupon mortgages (which represent a large portion of Freddie Mac's total portfolio) and 9.5% coupon IOs. As mortgage prices dropped so did IO prices, thus resulting in a drop of the overall MTM at the end of the fourth quarter of 1988. Though that trend continued through the first quarter 1989, it was not as severe, and was more than offset by changes due to portfolio growth. The more normal relationship between mortgage prices and IO prices is apparent from the change in prices that occurred from the first quarter of 1989 through the third quarter of 1989.

MTM HISTORICAL ANALYSIS

From Sep 30, 1988 to Sep 30, 1989


HISTORICAL MTM of the FIRM


HISTORICAL PRICE MOVEMENT

RECENT EVENTS

Board of Directors

On November 30, 1989, Freddie Mac's three-member interim Board of Directors elected Leland C. Brendsel, currently President and Chief Executive Officer, to serve as Chairman of the Board. Mr. Brendsel will continue to serve as President and Chief Executive Officer. The other interim Board members, Jack Kemp and M. Danny Wall, will continue serving (unless either of them chooses to terminate such service) as members of the interim Board of Directors until the corporation's first annual meeting of shareholders. At that meeting, which is required to be held no later than February 8, 1990, holders of Freddie Mac's voting common stock will elect 13 new members to the permanent Board of Directors. The remaining five members of the permanent Board are to be appointed by the President of the United States.

Management

On November 13, 1989, David W. Glenn, formerly Executive Vice President—Finance and Chief Financial Officer, was appointed Executive Vice President and Chief Operating Officer of the corporation. Mr. Glenn assumes responsibility for Freddie Mac's daily business operations and will directly supervise all corporate functions except internal audit, which continues to report to the President and Chief Executive Officer.

The finance division previously headed by Mr. Glenn has been separated into two new divisions, the Capital Markets division and the Accounting/Financial Reporting division. The Capital Markets division, headed by Mark J. Latimer, Vice President, includes the mortgage finance department (taking over the responsibilities of the former capital markets department) and the financial research and corporate finance departments. The Accounting/Financial Reporting division (for which a division head has not yet been named) consists of the control, corporate tax and performance management departments.

FEDERAL HOME LOAN MORTGAGE CORPORATION

SUMMARY OF REPORTS

As a shareholder-owned, yet federally chartered corporation, Freddie Mac provides information to its stockholders and investors, various Federal government agencies and regulators. Among the reports prepared are specific requests we have received from the Federal Reserve and the Treasury Department which highlight the Company's outstanding debt and borrowings, as well as, contingencies on mortgage-backed securities.

Until the passage of FIRREA, the members of the Federal Home Loan Bank Board also provided direction to Freddie Mac as the company's Board of Directors. Consistent with their responsibilities, the Board received monthly reports which highlighted key operating information, such as management's estimates of the level of interest rate and credit risk. With the new legislation, the Department of Housing and Urban Development has been given the oversight responsibility for Freddie Mac.

The enclosed summary outlines the various reports provided as of 1989.

FEDERAL HOME LOAN MORTGAGE CORPORATION

Summary of Reports to the Public, the Federal Government and Congress

REPORT	CONTENT	TIMING OF REPORT	PURPOSE OF REPORT
Public Information:			
Press Releases	Announcement of new products, programs, quarterly earnings, dividend declaration, etc.	As needed basis	To facilitate compliance with SEC regulations regarding public disclosure of key financial data to prevent insider trading, etc.
Quarterly Stockholders' Report	Announcement of quarterly net income and results of operations, quarterly financial statements and related statistics	Approx. 60 days after quarter-end	To inform stockholders and general public of quarterly operations
Annual Report	President's Letter, Discussion of Business Strategy, Management's Discussion and Analysis of Operating Results, Audited Financial Statements and Footnotes, List of Directors and Officers	Approx. 90 days after year-end	To inform stockholders and general public of the financial condition of the corporation and to comply with SEC disclosure requirements for similar businesses
Quarterly Investor Package	Quarterly and annual financial statements and operating statistics	Approx. 60 days after quarter-end	To inform analysts and investors of key financial data and operating statistics on which the management and financial strength of the corporation can be measured
Monthly Investor Package	Monthly operating statistics regarding purchase commitments, purchases and settlements	Approx. 15 business days after month-end	To inform analysts of activity for the period between the standard quarterly reports
Reports to the Federal Government:			
Federal Reserve System Monthly Report	Monthly outstanding balances of Contingencies and Debt & Borrowings	Approx. 60 days after month-end	To provide data for publication in official publications such as the Federal Reserve Bulletin

REPORT	CONTENT	TIMING OF REPORT	PURPOSE OF REPORT
Reports to the Federal Government (Continued):			
U.S. Department of Housing and Urban Development Monthly Report	Summary table entitled "Survey of Mortgage Lending Activity" which reflects the gross flow of mortgage loans, mortgage loan commitments and settlements	Approx. 60 days after month-end	To provide HUD with required statistics for tracking activity throughout the mortgage market industry
Monthly Activity Report to the Office of Finance of the Federal Home Loan Banks	Monthly mortgage purchases, security sales and outstanding balances	Approx. 60 days after month-end	To provide monthly statistics of Freddie Mac activity
Federal Reserve System Quarterly Report-Division of Research and Statistics, Board of Governors of the Federal Reserve System	Quarterly Balance Sheet	Approx. 60 days after quarter-end	To provide balance sheet data for preparation of the U.S. Government Sponsored Agencies sector in the Flow of Funds Accounts
U.S. Treasury Department Monthly Report	Monthly outstanding balances for single- and multiclass PCs, GMCs, short-term borrowings and long-term debt	Approx. 60 days after month-end	To provide current balances for the tracking of Freddie Mac's outstanding balances (this tracking is performed on all Government Sponsored Enterprises)
Reports to Congress:			
Fiscal Year Budget for the Office of Management and Budget	Prior fiscal year actual results and budgeted amounts for the next two fiscal years	Prepared annually within OMB specified deadlines	To provide the President and Congress with a basis for formulating the national budget
Regulatory/Government Compliance Reports:			
Information Statement	Detailed narrative and statistical disclosure which fully describes the nature of Freddie Mac's business and results of operations	Approx. 90 days after year-end	To provide investors, analysts, regulatory agencies, etc. with key operating and financial statistics. Additionally, it or a current supplement is included with the offering circular for each security
Information Statement Supplement	Quarterly financial statements, discussion of operating results, key financial statistics and recent events discussion	Approx. 45 days after quarter-end	To provide investors with the most recent financial data available. It is included within the offering circular for each security unless the Information Statement provides the most current data.

REPORT	CONTENT	TIMING OF REPORT	PURPOSE OF REPORT
Regulatory/Government Compliance Reports (Continued):			
Offering Circulars for Issuances of Debt	Description of the instrument offered to the public, description of Freddie Mac and intended application of proceeds	Upon offering the debt security to the public	To provide investors with required information on which to base their investment decision
Offering Circulars for Issuance of Securities	Description of the instrument offered to the public, description of Freddie Mac and most recent Information Statement and Supplements	Upon offering the security to the public	To provide investors with required information on which to base their investment decision

Senator CRANSTON. We will now go to the roundtable discussion.

I am going to pose the first question. You have an outline of the questions we intend to cover. I am going to skip the first for the moment, on the role of Freddie Mac and Fannie Mae, because of our time constraints, and go to the cost of Government guarantees.

The need for Congress to step in to protect depositors of thrift institutions has made us all painfully aware of the high cost that Government guarantees can produce. The President's budget noted that:

> Although the Government is not legally liable for Fannie and Freddie, it is widely believed that Government assistance would be provided if either were unable to support its debts. Failure to do that could disrupt mortgage markets and trigger the failure of mortgage lenders. Both the Federal deposit insurance funds and Ginnie Mae would be threatened.

So the question I would like to now put to you is, what risks do you believe are created for the Federal Government by the activities of the secondary mortgage market, particularly Fannie Mae and Freddie Mac? To what extent is the Government's risk affected by its statutory relationship with Fannie Mae and Freddie Mac?

What is the liability to the Federal Government of the implicit Federal guarantee on Fannie Mae and Freddie Mac debt?

I would like to start just by going around the table here. And we will not go all the way around the table on this question. But I do want to say, if anybody over here wants to agree with or contradict or amplify anything said over here as it develops anywhere, please do so.

So let me start with you.

RALPH SCHLOSSTEIN, PRESIDENT, BLACKSTONE FINANCIAL MANAGEMENT, NEW YORK, NY

Mr. SCHLOSSTEIN. Thank you. I would say, first of all, that the debt marketplace does assume that the Government implicitly does stand behind the debt obligations the MBS securities and the debt securities of Fannie Mae and Freddie Mac. That is implicit support, not necessarily explicit support, because I think, if you read through the law, there is not clearly sufficient support there to guarantee the obligations, nor are they intended to be guaranteed.

But nevertheless, the market assumes this implicit support has the effect of simply to reduce by somewhere on the order of 50 to 75 basis points the costs of housing, of mortgages for low and moderate and middle income families. I think that is a simple fact.

I would say, however, when one gets into the assessment of what is the risk, or the risk that that liability will in fact be drawn upon, then I would have to agree with the assessment included in this year's budget presentation that the risk is very remote.

The reason that I would say that is, a whole list of things which encompass fundamentally the business of Fannie Mae and Freddie Mac, which is a reinsurance function, in most cases, of risks that are of the lowest-risk loan that exists in the United States today.

I think if one looks at what the historical default relationships are, and what the loss relationships are, with respect to single family mortgage loans—and particularly the lower end of the home price spectrum—we are not talking about $500,000 or $1 million homes, where price volatility is far greater—we are talking about the average working man's home, where there is a far greater deal of stability.

One looks first at the default and loss experience with those loans. Number two, at the fact that, between that loss experience and Fannie Mae and Freddie Mac exist first of all the equity that the homebuyer has in that home, which in most cases is 25 or 20 percent. In the case where it is not 20 or 25 percent, there is a private mortgage company that insures that risk down to 75 percent.

So you have the equity in the home. You very often have private mortgage insurance. In addition to that, in some cases you have recourse to the lender that originated the loan, so you have the balance sheet of the lender interjected between Fannie Mae and Freddie Mac, and ultimately the Government.

Beyond that, you have the substantial capital of both of these enterprises. And if one looks at the interest rate risk, which I would argue is de minimis in both of these companies, and the loss experience, which has consistently been below the growth of reserves in those companies, and add the capital that exists in both of those companies, I would say that the risk of the Government ever being called upon to support that implicit guarantee is very, very remote.

Senator CRANSTON. During the time I have been on this committee, we have been through the FSLIC situation, where we obviously had to meet a Government guarantee. We have also been through the Lockheed loan, and then the Chrysler loan, and then the New York loan, where there was no Government commitment but there was a feeling that we could not let them sink, so we had to go to their rescue. So that is a factor in our thinking, as we come to grips with this.

Do you want to comment?

Mr. SCHLOSSTEIN. I was just going to say that I actually was on the staff of the Joint Economic Committee, and wrote a report on New York City's loan guarantee, and served on the White House staff during the Chrysler guarantee. And I would say that both of those situations, which worked out extremely well from the point of view of the Government—in fact, I think both of them turned out to be profitable, while certainly there was risk associated with them—are quantum leaps of greater risk than the type of risk that we see in this situation.

Senator CRANSTON. Good.

Ms. Spady.

NANCY SPADY, CHARTERED FINANCIAL ANALYST, MORGAN STANLEY & CO., INC., NEW YORK, NY

Ms. SPADY. Thank you.

I think that the most important distinction to draw between the earlier situations where the Government had to step in and the implicit guarantee behind Fannie Mae and Freddie Mac is the limitation on the business that these two companies undertake. I think that is the fundamental difference.

In this situation, the companies are very limited in the scope of their business; they are not guaranteeing million-dollar houses, nor are they trying to underwrite the risks in all parts of the housing market. Fannie Mae and Freddie Mac's restriction to funding only homes in the moderate- and lower-priced end of the housing market is one of the most important factors in maintaining their strong credit quality.

I would also agree with Mr. Schlosstein's comments about the other elements that stand between the Government and any need to fulfill its implicit guarantee: home equity, private mortgage insurance, recourse arrangements with thrifts or banks, and finally the capital and reserves of the two companies. All of these elements provide strong protection, according to scenarios I have run that include substantial declines in housing prices around the country. In fact, neither company would reduce their equity at all, even in the fairly extreme environment I have simulated.

Senator CRANSTON. Mr. Stanton.

TOM STANTON, COUNSEL, OLWINE, CONNELLY AND CHASE, WASHINGTON, DC

Mr. STANTON. I would like to make three comments, if I might. First of all, these are two of the highest leveraged companies in the United States.

If my arithmetic serves me right, Freddie Mac has its shareholder equity to outstanding securities of about 161-to-1. And in contrast to Mr. Maxwell's commitment to constantly build capital, there appears to be no significant sign between 1988 and 1989 that Freddie Mac wants to reduce its leverage.

That is the first issue. And of course, the trade-off is almost a zero-sum game between shareholders and taxpayers. If we increase that capital cushion, we dilute the stock, we dilute the earnings-per-share of the shareholders. But we protect taxpayers more, because taxpayers essentially are shareholders who do not get their returns, but merely stand there as creditors in case something goes wrong.

The second issue is the point made by Mr. Maxwell and Ms. Spady, that within their charters—and I guess Mr. Brendsel also—within their charters, these companies are limited to a single line of business, more or less.

First of all, single-line companies tend to be higher risk than companies that can diversify their portfolios. Second, within the single line, within their charter act authority today, there exists considerable latitude, if management wants to—and I am not saying that management in this case has—there exists considerable latitude to take risks.

For example, if Mr. Maxwell were succeeded by his predecessor, and that person wanted to bet the yield curve, there is latitude in the Fannie Mae charter act to do so. To give but another example, in 1987, in 2 weeks, Merrill Lynch dropped some $377 million trading stripped mortgage-backed securities. It is entirely within the charter act authority of these two institutions to engage in those lines of business.

Third, the Department of Housing and Urban Development in FIRREA lost the authority to use its approval powers over Freddie Mac to look at risks of a particular line of business, and merely has authority, according to the text of the House Banking Committee language, which is operative, merely has the authority to determine whether the particular action falls within the charter act powers. And the answer for stripped securities or betting the yield curve is, yes. There is no authority of HUD to intervene or disapprove a risky line of business.

Senator CRANSTON. Thank you very much.

Let's go to one more person on this list, and then I will see if anybody else wants to comment.

ANDREW CARRON, DIRECTOR, MORTGAGE RESEARCH DEPARTMENT, FIRST BOSTON CORP., NEW YORK, NY

Mr. CARRON. Thank you, Mr. Chairman.

When we talk about the risk to the Government, we must put it in context. The two representatives of the agencies have testified that, according to their analyses, their agencies would remain solvent even under circumstances that approach the level that was experienced during the Great Depression.

But what happened during the Great Depression? We had not merely one automobile company, one municipality, one large manufacturer in financial difficulty; failures pervaded the entire economy. The response of the Federal Government was to create numerous structures—including the RFC, which is a predecessor to Fannie Mae—to reestablish the mechanisms of finance and to get these industries going again.

Under the circumstances which would require the Federal Government to step in and support Fannie Mae and Freddie Mac, they would come at the end of a very long line. Many other institutions would have to be resuscitated long before it got to those two.

I will just make another few comments here, so that we can move on.

Mr. Stanton mentioned the trade-off between taxpayers and shareholders. Let's not forget that there is another participant: there is the trade-off with respect to homebuyers, the customers of Fannie Mae and Freddie Mac.

While capital is very important—to the thrift industry—to these firms as well—there is very clearly a trade-off. The more capital that is required, the higher the cost will be for mortgage funds. That is obvious to anyone who understands finance. And there is no magic number for the right amount of capital. It is a trade-off, and it is a trade-off from the point of view of policy.

I think that the approach that has been followed—of looking at stress tests, worst-case simulations, scenarios—is the appropriate one. This committee, HUD, and other interested parties must look at that trade-off and decide where the appropriate balance lies.

Senator CRANSTON. Thank you very much.

Now, does anybody disagree, or want to amplify or make any other statement on this? And I want to include the people at the front table who have already spoken. You wade into this discussion too, if you wish to.

PATRICK HENDERSHOTT, GALBREATH PROFESSOR OF FINANCE, OHIO STATE UNIVERSITY, COLUMBUS, OH

Mr. HENDERSHOTT. It seems to me, the people at the front table have already had their say. [Laughter.]

I would like to respond to two of the comments made.

The first issue is what would the cost of debt of these organizations be if they did not have the implicit Federal guarantee. The agencies contend that they are not taking any risks, that the taxpayers are not at all at risk. If this is true, it is hard to imagine that the cost of debt would go up by 75 basis points if the implicit Government guarantee were taken away.

If the cost of debt is going to rise by that amount when you take away the implicit guarantee, that says that the market thinks there is a whole lot of risk. My gut feeling would be that the cost would not go up by that much right now, because everything is pretty good for the agencies.

A related issue is how much capital the agencies ought to have. They ought to have enough capital that they do not need the implicit guarantee on their debt—enough that they might pay only 10 or 20 basis points more than the Treasury's cost, just like Triple-A corporations do. With this capital in the agencies the Government could get out of this business. That is the real rule as to how much capital they ought to have.

The other issue is, what would happen to the cost of homeownership. It is true that the cost of ownership could very well be higher if capital requirements were greater. Just as the cost of ownership might have been higher in the 1970's, if we had had tougher controls on the thrifts. But if you look at somebody today and ask him how he likes paying the $2,000 a family to bail out the thrifts and compare that with maybe saving $100 a year on a mortgage, the taxpayer might very well say that he would be happy to pay a little more on his mortgage in order to not have to pay $2,000 at some future point if one of these "catastrophes" should occur.

Senator CRANSTON. Are there any other comments on what has been said so far?

Yes.

Mr. BRENDSEL. I would like to make a couple of comments, one with regard to our commitment to build capital, or whatever statement was made.

First, my position is, we are well capitalized. Therefore, we only build capital in relation to the growth of our obligations and the risks assumed. In fact, I have been at Freddie Mac ever since 1982. We follow a consistent strategy all the way along. No, or nearly no interest rate risk, and very carefully controlling the credit risk.

As a result, we start out well capitalized as we did in the early 1980's years. It is only necessary to build capital as we add to the obligations. That is precisely what we are doing.

Now, with regard to the implicit guarantees, the only comment I would make is that Congress chartered these corporations with a special relationship to the Federal Government, in order to bring benefits to housing. I think it is clear we do borrow in a capital market at lower rates. How much of that is due to the fact that we have the implicit guarantee as it is stated, how much of it is due to other features of our relationship to the Federal Government—it comes down to, it is still a benefit, a benefit to housing. And it is done at little risk.

Senator CRANSTON. Leland, in your earlier statement, you said that no home owner wants to default on a mortgage. What is the average down payment for someone who holds a mortgage with Freddie Mac? How much would they have actually invested?

Mr. BRENDSEL. For Freddie Mac, it would be—the average downpayment at the time of purchase of the loan is around 30 percent, between 25 and 30 percent. Now, that ranges by the way from 5 percent down loans, all the way up to 50 percent down.

Senator CRANSTON. You stated that one of the reasons for us to have faith in the solvency, and better than solvency, of your agency, is the equity in homes that you possess, and that that is a very high equity.

Is there any comment on that?

ROBERT RUPP, MANAGING DIRECTOR, RESIDENTIAL MORTGAGE PRODUCTS GROUP, CHEMICAL BANK, NEW YORK, NY

Mr. RUPP. Senator Cranston, my name is Robert Rupp. I am a managing director at Chemical Bank in New York. I would like to thank you for inviting me to testify before this subcommittee. My comments are being offered on my behalf and not necessarily on behalf of Chemical Bank or any of its affiliates.

You have touched upon the one point I believe is most significant to the Government, that is the presence of a substantial equity cushion. In addition to that point, I would like to discuss a form of "early warning system" which was briefly mentioned earlier.

Senator CRANSTON. Would you put the microphone closer, please.

Mr. RUPP. Sure. We can start by dividing the businesses of Fannie Mae and Freddie Mac into two sectors: first, there is the MBS guarantee business, which is basically an insurance business, and second, there is the portfolio business, which is basically a duration management business.

Before I continue, I would like to respond briefly to one question that was previously raised. Is it possible, as Mr. Stanton suggested, that Fannie Mae and Freddie Mac could take positions in the market and take interest rate risks by playing the curve? Yes it is. Have they done so? Absolutely not.

With respect to the mortgage-backed securities business, a good analogy would be to consider the risks normally taken by an insurance company. One basic way to analyze the issue of governmental risk is to focus on the concept of deductible losses. When you obtain an insurance policy on your house or your car, you typically have a deductible obligation that effectively protects the insurance company from payments they would otherwise have to make.

In the case of Fannie Mae and Freddie Mac, there are two sources of "deductibles". One source consists of their combined capital base and the second consists of the equity cushion reflected in the loan-to-value ratios of their mortgage-backed securities and their mortgage portfolios. The average loan-to-value ratio of the mortgage-backed securities and mortgage portfolios of both Fannie Mae and Freddie Mac are below 60 percent. That is extremely conservative, by anyone's standards. Therefore the Government risk, in the form of an implied guarantee, would not become an issue until there was a full payout from these capital accounts plus full losses of the 40 percent equity cushion that is present in the related homes.

In addition to the safety provided by these deductibles, a second source of protection for the Government is the concept of market discipline, which I view as an "early warning device". It has been suggested, I believe at the full Senate Banking Committee hearings this past fall, that there was a distinct lack of market discipline in the context of Fannie Mae and Freddie Mac securities.

I take issue with that point from the perspective of both their equity and debt securities. As a starting point, let us consider a definition of "market discipline". In my view, market discipline means that information is disseminated publicly, the markets react accordingly, there is a change in the price of the security and there is a corresponding change in yield to the investor.

With that as a definition we should consider the agencies' equity and debt securities separately. I think most people here would agree, from the perspective of equity, that market discipline is currently in place. The stock of both Fannie Mae and Freddie Mac are widely traded; these companies have thousands of shareholders; they are covered by every analyst on the street; and the slightest change that occurs to their business is quickly reflected in their stock prices.

General economic conditions also affect their stock prices. Within the last week, there was a drop of approximately 4 or 5 percent in each of their shares because the Federal Reserve did not take action that the market was expecting which would have affected interest rates.

The last point to consider regarding their equity securities is that there is no precedent from the thrift bailout to suggest that the Government is going to give any form of protection to equity security holders. For ~~those~~ savings and loan associations that were in mutual form, there was no market discipline because their depositors were effectively their owners. For those savings and loan associations that converted from mutual to stock form, there was a version of market discipline in place and the people who owned equity in those failed S&L's actually lost money. Therefore, the costs of the thrift bailout is related to depositors, not equity holders.

Those who believe there is an absence of market discipline might offer stronger arguments in the case of the debt and mortgage-backed securities of the agencies. Let me speak to the issue as it relates specifically to their debt securities. I agree that there is an implicit guarantee on their debt and I believe the market relies to some extent on that guarantee. But that is not to say there is a complete absence of market discipline with respect to those securities. The debt securities of the various GSE's trade at different levels, relative to the Treasury curve and those levels vary from day to day. These movements occur partially as a function of liquidity or the lack thereof in some of the issues. But a large part of these movements reflect the market's perception of credit risk.

For example, 4 or 5 years ago when the Farm Credit System was in trouble, Farm Credit bonds traded at rates that were 50 to 100 basis points higher than levels where they typically would trade. Investors who owned those bonds either lost money or gained money, real money, as a result of the credit risk perspective that the market applied with respect to those bonds. Market discipline was clearly at work with respect to those GSE securities and it reflected doubts about the nature and extent of a Government guarantee.

In summary, I would view the entire concept of market discipline, particularly for two companies that operate in a fishbowl, as a very significant early warning system. We did not have that kind of discipline for the whole spectrum of savings and loan associations that were held in mutual form because there were no stockholders, there was no market discipline for those shares.

Mr. Sites.

JOHN SITES, SENIOR MANAGING DIRECTOR, FIXED INCOME DEPARTMENT, BEAR, STEARNS AND COMPANY, INC., NEW YORK, NY

Mr. SITES. Mr. Chairman, I am John Sites. I am a senior managing director of Bear, Stearns and Company. I would like to thank you as well for the opportunity to appear today.

I would like to respond to some of the comments I have heard, and amplify Mr. Rupp's and Mr. Schlosstein's comments.

I feel very strongly that there is as well a market discipline. And I think it is quite apparent from the performance of the equity of these companies, as well as the mortgage-backed securities issued by these companies, that investors have a clear preference for these companies' debt and equity issues.

Mr. Stanton referred to the potential dilutive possibilities of increasing equity. I would like to point out that there is a vote of confidence here that transcends my opinion, and the opinion of a lot of people in this room. And that is, the international marketplace where people are voting with their dollars.

We truly operate in an international environment, in terms of capital flows today. And there are literally an infinite number of places for investing entities to place their capital. They choose Fannie Mae and Freddie Mac securities with astounding regularity. And I think that is important.

As far as the comment about, there is more risk in a single line of business, that certainly applies in a smaller scale situation. But this is the United States of America, there is $3 trillion of home mortgage debt outstanding. I feel very confident that there are substantial economies of scale available to these companies through diversification of risk, or in the diversification of risk geographically, in the information accumulation and distribution which is so important to tapping into the capital market infrastructure, and finally to the standardization and upgrading of underwriting and securitization.

Senator CRANSTON. Yes.

Mr. STANTON. I guess I would like to respond, since my name has been mentioned a couple of times.

First of all, there are a number of risks, not just interest rate risk and credit risk. In fact, if we look at thrifts and banks, it turns out that management risk and operations risk are two of the most important factors in terms of the health or failure of an institution. And those risks have not really been addressed today.

Moreover, those risks have never been addressed by HUD. I could crystallize it with one question to HUD, which is: What is the quality of Fannie Mae's management information and control systems today?

Fannie Mae is now over a $300 billion company. Judging by the numbers, back of the envelope calculations, it grew by some $60 billion last year. Freddie Mac grew by some $45 billion last year. What is the quality of operations?

Now, to answer that question, economic theory—and I was delighted that Mr. Maxwell would quote Fischer Black—economic theory tells us that the Federal Government, as guarantor of debt and mortgage-backed securities, must act the way a private creditor would act.

Now, it is interesting that these representatives from the Wall Street firms today basically say, "Don't worry, trust the equity holders." If any of you have ever done transactions with Wall Street firms and seen the kind of indentures that they require and the kind of restrictive covenants—they are very often as thick as Mr. Maxwell's testimony.

Because creditors, when they are acting for themselves want to protect themselves. And somehow, the entire tenor of the discussion changes when we start talking about the Federal Government. And it would be extremely imprudent for a creditor simply to rely on the vested interests of equity holders to determine the best interests of American taxpayers.

Mr. MAXWELL. Mr. Chairman, excuse me, just two points.

Senator CRANSTON. Yes.

Mr. MAXWELL. In the first place, we are not talking about a theoretical company here. We are talking about two very large, real companies that operate as real businesses and are run by business people.

I think that Mr. Stanton's comment about management information systems implies, as perhaps Mr. Hendershott's comments also do, that without Government regulation there would be no management information systems.

Of course, we welcome HUD to come over and run the computers, and do all those wonderful things, because we feel we have the finest management information systems in the business. And I think Mr. Stanton recognizes that we started the development of those systems during his brief employment with Fannie Mae.

And I am glad to tell you, Tom, that at this point, having spent about $65 million or $75 million, the LASER system is completed, the MORNET system is completed, and we have the finest management systems there are.

Mr. STANTON. David, I want to agree with you. I am not challenging—and I seriously do not want my comments to be taken——

Mr. MAXWELL. You are talking about risks, and I am responding to the question——

Mr. STANTON. No, but I did not want to be challenging in terms of saying, "I know there is something wrong." My position is that the Government as guarantor of $300 billion of securities had better find out for itself.

Mr. MAXWELL. The second thing is the information supplied to investors. Now, it happens that we have tapped world capital markets, as has Freddie Mac, in order to bring the lowest-cost funds to American homebuyers. Every time we issue a security, a new kind of security overseas, we have hordes of lawyers and—you name it—through our place, looking at us and, doing what is known as a due diligence.

And they put out a prospectus, which is a big, thick thing that says what our outlook is, how risk averse we are, and all the rest of it. This is a real company, doing real business, and this goes on 365, or however many working days there are in a year.

The implication of Mr. Hendershott's comment, in talking about the S&L's, is that nobody would have said in 1978 that they would be bad today and that Fannie Mae is in the same situation today. But the fact is that we are not. Because nobody here is arguing that Fannie Mae and Freddie Mac should not be regulated. Nobody here is arguing that we should not operate our business on a sound basis. That is not a subject at issue.

We welcome hearings, we welcome regulations, and we have them. And so I think we ought to put that ghost to rest, because we are not talking about the S&L situation.

Senator CRANSTON. Mr. Schlosstein.

Mr. SCHLOSSTEIN. Yes. I guess I would like to make a couple of comments.

Number one, there seems to be a tendency on the part of some people at this hearing to constantly refer to the thrifts and the banks as an example of what is going to happen here. And I would hope that, if this hearing can accomplish one thing and one thing alone, it would be to recognize that Fannie Mae and Freddie Mac are not savings institutions, they are not banks; they are unique businesses which have dramatically different risks, and are managed dramatically differently than the way the institutions that are costing each and every one of us $2,000 a year were managed, are managed, were capitalized, and the businesses that they were in. If we can accomplish one thing, that would be a tremendous accomplishment I think overall.

I think the other thing that is concerning to me is that, when one looks at both of these companies, they are not completely private companies, in the sense that an IBM or a Ford or a General Motors is. They are chartered by the Congress, by the Government.

The reason they are so chartered is that they actually do serve, in addition to their private enterprise roles—and I think correctly people have judged that the best way to provide the services they provide is through a private organization—but they do serve legitimate and strong public purposes.

And if one goes down the list of things that they accomplish, whether it is saving low and moderate income people housing—you know, if it is 50 or 75 basis points a year on a $100,000 mortgage, that is $500 or $750 a year for a family. That is a real lot of money, and it is not costing the taxpayers a penny to provide that.

I would submit to you that in 1984 and 1985 and 1986, when Texas and the southwest were in financial difficulties, if the services that are provided by Fannie Mae and Freddie Mac were provided by purely private sector companies, IBM, GM, or Ford type companies, they would have very seriously considered either redlining those areas of the country, or dramatically increasing the cost of mortgage insurance, as the private mortgage insurers did in those areas of the country. A real service was provided to those regions through the stability of a Fannie Mae or a Freddie Mac. In cyclical downturns, the same thing occurs.

I think John Sites referred to the fact that today it is just about as likely that an insurance company in Japan or a commercial bank in Europe will be financing, ultimately, the home purchase in Youngstown, OH, as it is that the local savings institution is. And I assure you that that insurance company in Japan, or that bank in Europe, would not buy that loan without the wrapper of a Fannie Mae or a Freddie Mac.

And that is not even mentioning what they do for low and moderate income housing, which I assure you that no purely private enterprise would accomplish.

I think we have to be fair about the trade-offs, and what we are getting as taxpayers, for what is this remote contingent liability that we are talking about today.

Senator CRANSTON. Mr. Hendershott, do you have a comment?

Mr. HENDERSHOTT. The reason people raise the thrift issue is because we are always told by those being insured, as we were told by thrifts, "We have never cost the taxpayer a dime." And that is true. Guarantee never cost insurers a dime. When things go wrong, it costs the insurer hundreds of thousands of dollars.

I do not think anybody here has said that Fannie and Freddie are thrifts or that we are going to have the thrift problem with them. Quite frankly, we do not know what kind of problem we might have with Fannie and Freddie.

I do not think anybody here has said that these agencies are badly run. But I also do not think anybody has said that a taxpayer representative has looked carefully at these agencies.

Does Fannie Mae have to file a TB-13? I am on the board of directors of a thrift in Columbus. And these people have to file forms that you would not believe. TB-13 is what happens to the market value of the firm if interest rates go up by 400 basis points.

Do Fannie Mae and Freddie Mac have to file those kinds of things? I think the thrift industry last year probably paid—out of their own pockets—$100 million for these regulators coming through and checking all of their loan files. Does that go on at Fannie and Freddie?

I do not know. But nobody in this room has implied that anything like that is done. The oversight seems to be incredibly weak.

Senator CRANSTON. Al.

Mr. DELLIBOVI. I think we have stipulated at HUD that we have not done as thorough a job in the past as Secretary Kemp wants us to do in the future. We are taking those steps. We will have a plan, it will be an adequate one.

I do not know, Mr. Stanton, if it will bring us to the data processing room of Fannie Mae, but we will get the data that we need from Fannie Mae and from Freddie Mac.

As far as a TB-13, I do not know whether all those bankrupt S&L's that filed TB-13's are peddling them, if that is part of the disposition sale.

We are going to get the data that we need to make our decisions, and we are not going to base it on what did not work for the S&L's. They are different businesses, and we are going to find out the materials and information that we need. We are going to request it——

Mr. HENDERSHOTT. It is a new regulation just put out. They had to meet it for the first time January 1. This is not an old regulation that they have been following for years.

Mr. DELLIBOVI. Well, whatever—they were regulated in the past very heavily by the bank regulators, and that did not seem to avoid their problem.

Senator CRANSTON. Mr. Stanton.

Mr. STANTON. The problem with the Federal Home Loan Bank Board was that by law it was required to promote the industry it was regulating. HUD has a similar conflict of interest.

If we look at HUD's interventions to Fannie Mae over the past years, what we find is that in the late 1970's HUD attempted to get Fannie Mae to buy more center city and low income mortgages, and Fannie Mae resisted in a pitched battle. In the early 1980's, HUD proposed privatizing Fannie Mae, and again Fannie Mae successfully resisted.

These are broad issues of national housing policy, similar to the broader issues that were concerning the Federal Home Loan Bank Board.

The respectful suggestion here is that regulation of safety and soundness, and only those regulations, not extraneous regulations, be placed in a green eyeshades regulator like the FDIC, that will simply go in and look at credit quality, interest risk, operations risk, management quality, and the usual green eyeshades kind of matters that any prudent creditor would look at.

Mr. MAXWELL. Just one comment. Perhaps because they were not paying much attention to everything else, we actually did get that kind of looking at from HUD over the last 8 years. And I think I should note that, for the record. We submit piles of material to HUD that—it is not a TB-13, but——

Mr. HENDERSHOTT. It stands for "tuberculosis." [Laughter.]

Mr. MAXWELL. All right—Is it catching? [Laughter.]

We did not submit that, but we submitted every quarter this big pile of everything about our company. And then, two presidentially appointed, Senate confirmed officials of HUD, plus staff, came over every quarter, and we sat down and went over these materials.

Unfortunately that was not orderly, and we welcome a much more orderly, and indeed, if necessary, more thorough look. I want to make it very clear today that, green eyeshades or whatever, we are an open book. And we have no hesitation in being looked at.

Senator CRANSTON. Thank you very much.

ANDY CARTER, SENIOR VICE PRESIDENT, JENNISON AND ASSOCIATES, CAPITAL CORP., BOSTON, MA

Mr. CARTER. Thank you.

I represent Jennison and Associate, a subsidiary of Prudential Life Insurance Co. We manage over $20 billion for pension funds. So, in a sense, I represent investors. We, today, own over $1 billion in Fannie Mae and Freddie Mac securities.

We applaud your concern for thorough oversight and adequate capital in these two GSE's. However, I would suggest that there is another concern which may be even more important.

There are today outstanding over one-half of a trillion dollars of securities either owed directly or guaranteed by Fannie Mae and Freddie Mac. All of these securities say on their face that they are not obligations of the general government and that they do not represent a full faith and credit obligation of the Government.

However, both Fannie Mae and Freddie Mac are relieved of the burden of SEC registration and other reporting procedures which private companies are required to follow.

Their securities are usable as primary reserves by the banking system. They're advertised everywhere by the Government and by private reporting agencies as U.S. agency securities.

These trade almost as if they were U.S. Treasury issues. The market clearly believes that these securities do carry the backing of the Government. I think the greatest risk to the Government today isn't, frankly, how these two GSE's are managed in the future, although I think that that is a very important concern. There are already outstanding one-half of a trillion dollars obligations which the general investing public believes are backed by the Government.

Should there be any hint from this committee or from the administration through the Treasury that there might be some backing away from the honoring of these obligations by the Government itself, I believe that the consequences would go far beyond the market value of the securities of Fannie Mae and Freddie Mac. They would suffer very much.

I believe that all of the securities issued by the United States and even U.S. Treasury itself would trade at much higher yields and could cause a financial panic.

Senator CRANSTON. Are you concerned that any adverse implications or message could go out from this hearing today?

Mr. CARTER. I have heard no such hint. I have, however, had people express such concerns to me, not about this committee, but I do feel that it is of fundamental importance that the committee understand that should there be any feeling in the marketplace that the Government were to back away from honoring either Freddie Mac or Fannie Mae's direct or guaranteed obligations, that the results would be far more serious than any of the discussions. In fact, any of the dangers that we have discussed so far this morning.

Senator CRANSTON. It seems to me that we could conclude from what we have heard thus far today is that both are very well-run, both are very sound. There is no explicit guarantee standing behind them from the Government. That there is implicit the understanding that, as we didn't want to let Lockheed, Chrysler, New York go under, we didn't want them to go under—if that ever came to be an issue before us, which seems to be extremely unlikely.

Senator D'AMATO. I wonder if I might.

Mr. Carter, let me ask you. We haven't talked about this at all, have we?

Mr. CARTER. No, we have not.

Senator D'AMATO. You don't even know what I'm going to ask you?

Mr. CARTER. I beg your pardon?

Senator D'AMATO. You don't even know what I'm going to ask you.

Mr. CARTER. No, sir.

Senator D'AMATO. OK. [Laughter.]

I received a lot of training in this area lately.

Senator CRANSTON. I'm going to go vote while you're doing this. [Laughter.]

If I don't get back before he has to leave, Don Campbell will carry on.

Senator D'AMATO. What would higher interest rates do in the mortgage area? Would it cost the RTC more money?

Mr. CARTER. I imagine it would almost certainly do so because the securities that they are going to sell would go down in price.

Senator D'AMATO. In other words, with the yields at lower levels, the disparity would increase and, thus, the cost to the RTC and to the Federal taxpayer would be increased.

Is that right?

Mr. CARTER. That's right, because the RTC's liability would remain the same, but its assets would go down in value.

Senator D'AMATO. The gentleman to your right, Mr. Rupp, do you agree?

Mr. RUPP. Absolutely, Senator. Those of us who manage portfolios watch interest rate movements——

Senator D'AMATO. I don't think we know each other, do we? We haven't talked about this?

Mr. RUPP. No.

Senator D'AMATO. You have not contributed to any of my campaigns, have you?

Mr. RUPP. No. [Laughter.]

But I do live in New York City.

Senator D'AMATO. OK. Don't go any further——[Laughter.]

The gentleman to your right, do you have an opinion on that?

Mr. FLANNERY. I think it has got to be a case that the Government guarantee is worth something in the market.

Senator D'AMATO. Interest rates go up?

MARK FLANNERY, BARNETT BANK PROFESSOR OF FINANCE, GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, UNIVERSITY OF FLORIDA, GAINESVILLE, FL

Mr. FLANNERY. They would go up.

Senator D'AMATO. What happens to RTC?

Mr. FLANNERY. What would happen to RTC, the cost of funding the RTC portfolio would rise correspondingly.

Senator D'AMATO. To the taxpayers.

Mr. FLANNERY. To RTC and, indirectly, to the Treasury, yes, sir.

Senator D'AMATO. Good. Did you get that? The media, did you get that?

So, when you report it, you know, because it is great, a little knowledge is dangerous. Very dangerous, because everybody says everything is undercapitalized.

And so there is a distinction between adequate capital, and requiring too much capital, and there is a distinction between a thrift and Freddie Mac and Fannie Mae. And the adequacy of their capitalization may be tremendously different in terms of what was required.

Is that true?

Now, if you require more capital for Freddie Mac, and Fannie Mae, do the interest rates go up? Do they have to get higher interest?

Mr. CARTER. They would go down because they would be regarded as more safe interests than they are today.

Senator D'AMATO. What about the mortgage rate? What do they have to get in return if you require additional capital?

Mr. RUPP. The money has to come from somewhere, Senator. If you view Fannie Mae and Freddie Mac as operating at margins that are conservative, and if you view the intermediaries who originate mortgages also as operating at conservative margins, you conclude that the money has to come from somewhere and it is unlikely it will come from the agencies or the intermediates.

Therefore, in my view, the money ultimately will come from the borrower.

Senator D'AMATO. David Maxwell, you and I have spoken and we have talked about this situation.

What impact would raising capital standards have with respect to your operation?

Mr. MAXWELL. Senator D'Amato, first of all, let me say that, like everyone else at this table, we want to have adequate capital; capital that is sufficient under any set of even the most extremely severe circumstances.

But if, as my friend Mr. Brendsel has said in his statement, if you raise capital beyond the point that is required to protect against the extremely severe circumstances and extremely unlikely economic circumstances, then, indeed, as Mr. Rupp says, that money has to come from somewhere.

And in order to continue to attract the primary capital from the private market and realize the return on equity that the private market expects, there would have to be higher mortgage rates ultimately, in my view.

And I did say that to you before.

Senator D'AMATO. Mr. Brendsel, you and I spoke about this because I asked you about it and I was concerned about the adequacy of capital in reading many of the reports and hearing some of the statements and some of the misstatements that were out there.

You raised the issue with me, and let's go over it quickly because I'm going to have to get down to that vote and I will spare the rest of you this little exercise. You raised with me your concern that not only would it raise your costs but, in addition, it would be that situation where there would be an impact on RTC.

Would you care to comment on that?

Mr. BRENDSEL. We've already heard some of that already reflected in the comments. I just summarized increasing the capital standards or excessive capital that would be held by Freddie Mac as a cost. And that cost would be borne ultimately in the mortgage markets. Yields would be higher. Interest rates would be higher.

And, obviously, mortgage assets like those at the RTC would decline.

Senator D'AMATO. And you believe that you are adequately capitalized?

Mr. BRENDSEL. Yes, well-capitalized, Senator.

Senator D'AMATO. OK. Mr. Campbell.

Thank you. I'm going down to vote.

Mr. CAMPBELL [presiding]. I have worked here 14 years and I always feel like the Sorcerer's Apprentice when this happens. [Laughter.]

The discussion has been fairly wide-ranging, touching a number of the questions in the discussion guide. One issue that was mentioned might be a good focus for the next set of discussions.

And that is the capital adequacy of Fannie Mae and Freddie Mac. The discussion has already touched on the fact that Fannie Mae maintains capital of about 0.8 percent of its portfolio, and Freddie Mac has about 0.6 of its portfolio.

The question is: What is an appropriate capital standard? And how should that be established?

So, the question is what are the appropriate capital standards for Freddie Mac and Fannie Mae? To what extent are the accepted standards for other industries, such as the thrifts, mortgage servicers, mortgage insurers, or other industries appropriate or inappropriate for Fannie Mae and Freddie Mac?

And how should any capital standard or other performance standards be established?

Some people haven't talked yet. Mr. Kriz might be next in line here.

JOHN KRIZ, VICE PRESIDENT, MOODY'S INVESTORS SERVICE, NEW YORK, NY

Mr. KRIZ. As far as appropriate capital standards, what we do at Moody's is we try to break up a company into its constituent parts, try to determine precisely what lines of business that it is in, and then determine what level of capital would be most appropriate for those lines of business.

Obviously, this assumes, ceterus paribus, that you've already made a determination of its liquidity, its asset/liability management, asset quality, and so forth, and are trying to isolate capital as a standard.

At that point, we draw a conclusion. In Freddie Mac's case, it is mostly in the financial guarantee business rather than the mortgage insurance business; unlike mortgage insurers, Freddie Mac does not really take a first-loss position in mortgages. A first-loss position really is who is first in line when a loss occurs—either the home owner, who has put up equity, or a private mortgage insurer who has insured the mortgage.

The same is true for Fannie Mae. They're not really in a first-loss position. So, using mortgage insurance analysis can be useful, but you have to understand the unique position of these two agencies to try to determine a capital standard.

Also, in Fannie Mae's case, it owns mortgage securities in a portfolio as an investment. There are many types of institutions around the country that own mortgages as investments.

And so there are many models that are available to use to try to determine what the risk of loss would be for that particular business line.

And so that is how we would advocate the issue be approached.

Mr. CAMPBELL. Comments from those who haven't spoken? Those who are directly in opposition to something that has just been said? Mr. Wolf.

FREDERICK D. WOLF, PARTNER, GOVERNMENT FINANCIAL SERVICES, PRICE, WATERHOUSE, WASHINGTON, DC

Mr. WOLF. My name is Fred Wolf. I'm with the Price-Waterhouse. Prior to that, I was with the General Accounting Office for 6 years. And during that time I spent a fair amount of time looking at the thrift problem and failed thrifts.

As Mr. Brendsel said, we were asked to come in and take a look at capital adequacy for Freddie Mac. We did an in-depth, independent review; the bottom line of that review is that we believe that the capital is adequate at Freddie Mac.

[The material referred to follows:]

1801 K Street, N.W.
Washington, DC 20006

Telephone 202 833 7932

Price Waterhouse

February 5, 1990

Mr. Leland Brendsel
Chief Executive Officer
Freddie Mac
Reston, Virginia

Dear Mr. Brendsel:

At your request we have conducted an independent assessment of Freddie Mac's capital adequacy. This report includes a discussion of the work we did in performing that assessment and the conclusions we reached.

Conclusion and Scope

Capital adequacy is a subjective evaluation related to an individual organization and is impacted by and is dependent on the business the organization is engaged in, the risks it takes and the manner in which it conducts and controls its operations and risks. There is neither one exact amount of capital which is always adequate nor is it certain that what is considered adequate at one point in time will always be adequate.

However, utilizing economic stress tests and other capital evaluation techniques and based upon our assessments of Freddie Mac's business, its portfolio of guaranteed loans, the economic and financial risks faced by Freddie Mac and the manner in which it conducts and controls its business, it is our opinion that Freddie Mac's capital is adequate and provides a reasonable level of taxpayer protection at a reasonable cost.

In reaching our conclusions, we have:

- Evaluated the financial, business and economic risks inherent in Freddie Mac's business and portfolio;
- Utilized, and tested, Freddie Mac's stress test financial model to assess the impact on Freddie Mac of various economic scenarios, including a scenario as extreme as the Great Depression;
- Evaluated Freddie Mac against capital standards and other criteria utilized in the thrift and mortgage insurance industries; and
- Reviewed the policies, procedures and controls utilized by Freddie Mac to manage and control its business and to minimize risks.

We did not perform an audit of Freddie Mac's financial statements nor did we test the implementation of Freddie Mac's policies, procedures or controls. Freddie Mac's 1989 financial statements, which we utilized, were audited by Arthur Andersen & Co. and their opinion on those financial statements, dated February 2, 1990, was reviewed by us. We also did not independently test compliance with any policies, written procedures or established internal controls. Rather, our work focused on our assessment of the portfolio and Freddie Mac's general methods and thoroughness of approaches to managing each of the key risks which can affect Freddie Mac's capital status, both present and prospective. Arthur Andersen has provided an opinion on the adequacy of Freddie Mac's internal controls, dated February 2, 1990, which we relied upon. We met with representatives of Arthur Andersen and reviewed portions of their audit working papers; the United States General Accounting Office has reviewed and reported favorably on Arthur Andersen's 1988 financial audit and reports on internal controls and compliance.

Basis for Conclusions

As more fully discussed in this report, the primary factors which caused us to reach our conclusions regarding Freddie Mac's capital adequacy are:

- Freddie Mac's business is uniquely focused on providing liquidity to the home mortgage market primarily through the purchase and subsequent pass through to investors of single-family mortgages. This business results in the elimination of interest rate risk from 95% of Freddie Mac's almost $300 billion portfolio of mortgages.

- Freddie Mac's credit risk is almost exclusively in low loan to value single-family (1-4 family) mortgages, with credit ennancements, often including mortgage insurance, for all mortgages with a loan to value ratio at origination in excess of 80%. Over the past 25 years, and also in recent years, the default rate on such mortgages has been both predictable and low in relationship to almost all other credit risks. Freddie Mac's net default rate on single-family mortgages has been among the lowest in the industry.

- The economic stress tests which we utilized and tested indicate an ability, under generally very conservative assumptions, to survive for periods of approximately 10 years under times of the most extreme economic depression. This is consistent with a top tier credit rating from national debt rating organizations.

- While not directly applicable to Freddie Mac's business and risks, after appropriate adjustments to reflect Freddie Mac's particular business, Freddie Mac appears to meet capital adequacy standards for the thrift and mortgage insurance industries.

- Freddie Mac has a strong set of policies, procedures and controls to ensure that their business, operations and risks are properly managed and controlled.

New Oversight Focus

As Freddie Mac begins a new era of public oversight through the installation of a broad based Board of Directors and expanded HUD oversight, we believe it is important for those oversight bodies to focus on those key features which keep Freddie Mac's capital adequate and which are key drivers in Freddie Mac's business. Chief among those are 1) the level of credit risk accepted by Freddie Mac and the policies, controls and procedures employed to ensure that credit risk is kept to an acceptable level, 2) the policy of elimination of interest rate risk through pass-through of substantially all mortgage securities, and 3) the minimization of default costs.

We believe management needs to continue its focus on and periodically provide reports to the oversight bodies regarding:

- Key portfolio attributes such as:
    - Loan to value ratios,
    - Percentage of portfolio retained versus sold,
    - Default percentages and default costs,
    - Regional dispersion of portfolio,
    - Regional default and home price appreciation levels, and
    - Pricing levels and trends.
- In addition to monitoring those key variables of an economic or financial nature, the procedures and controls used to ensure credit risk minimization, a particular strength of Freddie Mac, need to be both constantly monitored and evaluated with a particular focus on:
    - Underwriting policies and controls,
    - Ensuring appropriate credit enhancements are obtained, and
    - Approval and monitoring of new products and negotiated transactions.

Report Contents

This report includes the following sections:

I. Introduction - A discussion of the background, purpose and scope of our study;

II. The Role of Freddie Mac - Freddie Mac's mission, business and portfolio;

III. Comparison of Problems - A discussion of the attributes of failed thrifts and their applicability (and lack of applicability) to Freddie Mac;

IV. What is Capital Adequacy? - Definitions of capital and capital adequacy;

V. Capital Position - The use of financial models and capital standards to assess Freddie Mac's capital adequacy;

VI. Evaluation of Risk Factors Affecting Capital - An analysis of risks which could impact Freddie Mac's capital adequacy and how they are managed and controlled; and

VII. Conclusion and Recommendations - Our final conclusions on capital adequacy and some recommendations for management and oversight.

Yours very truly,

Price Waterhouse

Background and Purpose of the Study

The failure of the Federal Savings and Loan Insurance Corporation (FSLIC) will cost the American taxpayer well in excess of $150 billion. A failure of this magnitude raises questions concerning the strength of other federally sponsored guarantee programs, which form a large part of this country's financial infrastructure. Combine the FSLIC debacle with other recent losses in guarantee programs, for example, the extensive losses and financial problems in HUD loan programs, and you create an atmosphere that has Congress, the Executive branch and the public they represent nervous that other financial liabilities lie hidden in the wings.

In response to this concern, the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) included provisions which require two studies, one through the Treasury and the other through the Congressional investigative arm, the General Accounting Office (GAO). The studies are designed to review a number of direct and indirect federal programs which expose the taxpayer, either explicitly or implicitly, to a risk of loss. One of the entities included in this GAO study is the Federal Home Loan Mortgage Corporation (Freddie Mac). Specifically, GAO and Treasury were tasked with evaluating the financial strength of Freddie Mac, and the adequacy of its capital, in order to gauge the ultimate risk to the U.S. government.

Prior to FIRREA's enactment, Freddie Mac has conducted several reviews of its own capital adequacy and capital risks. In December of 1989, in anticipation of the GAO and Treasury studies and because of Congressional interest in this issue, Freddie Mac commissioned Price Waterhouse to conduct an independent assessment of Freddie Mac's capital adequacy.

In any institution, capital should be sufficient to provide protection from failure caused by various operational risks. These "business" risks can range from cyclical economic downturns to outright fraud. As a result capital adequacy is not an absolute but rather can only be evaluated by an in-depth study of the business in which an enterprise is engaged. The amount of capital necessary is really a function not only of risk but also of how an institution deals with risk. At the same time it should be noted that risks can never be eliminated or even fully controlled and economic events can force even the best of companies into periods of unprofitability. Accordingly, an enterprise must maintain a buffer against those risks and economic events that can adversely affect its operations; capital provides such a buffer. The size of the buffer will, however, vary just as businesses vary.

Indeed, finding the right balance between too much or too little capital is one of the most basic of business decisions facing all corporate managers. Too little capital, and the corporation is exposed to the risk that it will be unable to survive adverse internal decisions or negative market/economic conditions. Too much capital, and the corporation and its shareholders are hurt by a diminishing return on equity and, in the case of Freddie Mac, by a higher cost to the ultimate homeowner. As a result, the mere existence of risk is not a reason to boost capital beyond that which is necessary since excess capital carries a cost ultimately to the program beneficiaries and shareholders.

Scope of the Study

Freddie Mac has evaluated its unique operating environment and risks. This evaluation has been translated into detailed strategies, policies and procedures. In addition, Freddie Mac has prepared a capital adequacy model that can be used to assess the impact on Freddie Mac of changes in the economic or operating environment such as a depression scenario.

The purpose of our study is to evaluate the reasonableness of their policies and model in the context of capital adequacy. In order to accomplish this, we must isolate Freddie Mac's key risks; i.e., What could happen to generate losses sufficient to wipe out capital? After we have isolated these risks we must determine if they are properly reflected in the capital adequacy model and in policies and procedures.

Our study has two primary steps, a review of capital adequacy through the use of the capital adequacy model and industry capital standards, and a review of other risks pertinent to a comprehensive assessment of Freddie Mac's capital adequacy.

With regard to the model, proper reflection of operating risks involves evaluating the model's accuracy in projecting the possible losses caused by variables such as interest rates and credit risk. As part of our work we evaluated the models:

- Theoretical Approach - We have evaluated the appropriateness of options pricing modeling approach as a framework to assess the borrower's decision to default or prepay. In conducting our review we incorporated the published assessments from academic experts in the field in addition to our independent evaluation. In recognizing that the options pricing models have recently been applied to the analysis of mortgage default decision, we compared this approach to other methodologies. We assessed concerns that have been expressed with this approach such as the over emphasis of equity at the expense of other socio-economic factors, i.e., unemployment, that may cause or explain default and prepayment.

- Data Selection and Specification of the Working Model - We reviewed the adequacy of all data employed in the empirical model. Particular attention was paid to the development of the homeowner equity appreciation data. In addition, the model specifications were evaluated for consistency with the theoretical constructs and for properly handling the realities of the data information.

- Empirical Estimation and Simulation Performance of the Specified Model - Our review of the empirical estimation assessed the proper use of statistical estimating procedures for the given model specification and data information. In this capacity, we identified areas where the statistical estimation procedures may adversely influence the model results and assessed the impact on the overall projections. We evaluated the results of alternative model simulation performance to determine the reasonableness of projections over extremes in economic conditions and identified areas of expected strength and weakness in forecast simulation.

- Adequacy of the Economic Scenarios Employed in Conducting Stress Tests - We examined the economic scenarios used for their ability to properly reflect the kinds of severe economic stresses that could deplete the capital reserves of Freddie Mac.

Our overall judgment on the default and prepayment risk analysis was targeted toward assessing the extent to which these analytical tools meet the intended uses of accurately projecting the impact on Freddie Mac capital reserves under diverse ranges and types of economic stress.

Utilizing the financial model and also utilizing other capital adequacy criteria such as industry capital standards and comparisons, we formed a tentative opinion about Freddie Mac's capital adequacy. The model, however, only projects losses which could occur from existing business. To evaluate if Freddie Mac could risk capital through future transactions it was also necessary to review policies, procedures and controls relating to key operating risks. This involved understanding Freddie Mac's mission, business, and unique risks and how that is translated into controls, policies and procedures.

To review these areas we included as part of our work an assessment of policies and controls related to:

- Underwriting practices and the existing portfolio;
- New products;
- Liquidity maintenance;
- Credit surveillance;
- Seller/servicer monitoring;
- Asset/liability and interest rate risk management;
- Credit risk;
- Internal accounting and management controls; and
- The policies, procedures and management information systems relating to these functions.

Our approach to this segment of the study included the following:

- Obtaining a full understanding of the risks which Freddie Mac faces in its business operations, current portfolio and business environment, identifying how those risks are managed and how the resulting risk or lack of risk affects Freddie Mac's capital;
- Reviewing any documents addressing identified risk areas prepared by management, internal audit, and external consultants or auditors;

- Evaluating or reviewing studies of the systems in place and steps taken by management to measure and minimize exposure in each of the identified areas;

- Interviewing the appropriate Freddie Mac management to determine the current status of Freddie Mac's policies and business approach to managing these exposures; and

- Reviewing Freddie Mac's policy statements and strategic plans to evaluate how the direction of management interplays with risk exposures in deriving a prudent capital position.

We did not perform an audit of Freddie Mac's financial statements nor did we test the implementation of or compliance with Freddie Mac's policies, procedures or controls. Freddie Mac's 1989 financial statements, which we utilized, were audited by Arthur Andersen & Co. and their opinion on those financial statements, dated February 2, 1990, was reviewed by us. Rather, our work focused on our assessment of the portfolio and Freddie Mac's general methods and thoroughness of approaches to managing each of the key risks which can affect Freddie Mac's capital status, both present and prospective. Arthur Andersen & Co. has provided an opinion on the adequacy of Freddie Mac's internal controls, dated February 2, 1990, which we relied upon. We met with representatives of Arthur Andersen and reviewed portions of their audit working papers; the United States General Accounting Office has reviewed and reported favorably on Arthur Andersen's 1988 financial audit and reports on internal controls and compliance. Freddie Mac also prepares marked-to-market financial statements which we utilized; these statements are currently being audited by Arthur Andersen & Co.

Prior to assessing the risks to the taxpayer, it is important to outline why the risks exist at all. To do this one must understand both the mission and operations of Freddie Mac.

Freddie Mac was chartered by Congress in 1970 as part of the Emergency Home Finance Act. Its purpose was, and still is, to facilitate home ownership through the growth of a secondary market in conventional mortgage loans. Since Freddie Mac was created to assist the secondary market needs of the thrift industry, it was originally chartered as a government-sponsored corporation with beneficial ownership placed in the hands of the Federal Home Loan Banks. Later ownership was extended to individual thrifts who were members of the FHLB system. It was not until 1989 that ownership was opened for the first time to public investors. Freddie Mac's "going public", however, has by no means eliminated government involvement. The U.S. government continues to have oversight responsibilities through the Board of Directors and the Department of Housing and Urban Development (HUD) and is considered by investors to guarantee the debt of Freddie Mac.

Freddie Mac's Mission and Business Operations

Freddie Mac's operations are uniformally directed to its mission of providing liquidity to the home mortgage market. Each and every day -- regardless of economic conditions -- it purchases mortgages from lenders, pools those mortgages and packages them into securities which are sold in the capital markets. By linking the capital markets with the mortgage origination market, Freddie Mac brings the efficiencies of the secondary mortgage market to lenders and home buyers in the form of more affordable mortgage credit. Freddie Mac is able to enhance the secondary market by eliminating credit risk to the mortgage investor through its guarantee. Essentially all other financial risks, namely prepayment risk (callability) and interest rate risk (market volatility) are passed through Freddie Mac to investors. Only about 5% of Freddie Mac's almost $280 billion loan portfolio is retained. This is a very important feature of the organization because it substantially eliminates vulnerability to sharp or prolonged movements in interest rates. Freddie Mac's key business risk is that the mortgages underlying the securities it sells to investors will not be repaid. Given this, it is extremely important to understand the type of mortgages which Freddie Mac guarantees and the characteristics of the loan portfolio. The salient features of its total portfolio are:

- Approximately 70% of the portfolio is in single-family (1-4 family) fixed rate mortgages with loan to value ratios (LTV) of 80% or less at origination date.

- Single-family fixed mortgages with loan to value ratios greater than 80% at origination are covered by mortgage insurance or other credit enhancements and represent only 17% of the total portfolio.

- Single-family adjustable rate mortgages (these have loan to value ratios mostly 80% or less at origination) and multifamily mortgages (mostly with loan to value ratios even less than single-family mortgages) account for only 9% and 3%, respectively, of the portfolio.

In summary, Freddie Mac is almost solely involved in one to four family residential mortgages for which it bears no interest rate risk. This clearly distinguishes it from almost all other financial institutions and separates it from the 1980's crisis in the thrift industry. The failure of thrifts in the 1980's was caused by a host of problems of which credit risk on residential mortgages with low loan to value ratios was not one. The following section discusses the portfolio in more detail.

Freddie Mac's Portfolio

As of September 30, 1989, Freddie Mac had almost $280 billion in single-family fixed and adjustable rate mortgages and multifamily loans. Almost 95% of these mortgages have been passed to the secondary market through mortgage backed securities (PC financed). The use of mortgage backed securities allows Freddie Mac to enhance the mortgages with its credit guarantee while passing interest rate risk on to the investor. A portion of Freddie Mac's on-balance sheet portfolio is financed through multiclass securities. These securities like PCs allow Freddie Mac to pass interest rate risk through to the investor. The remainder of the portfolio classified as "retained" represents mortgages for which credit and interest rate risk is retained.

	September 30, 1989 (unaudited)			
	PC Financed	Multiclass	Retained	Total
		($ in billions)		
Single-family fixed rate mortgages	$225.6	$5.8	$11.4	$242.8
Single-family adjustable rate mortgages	25.6	-	.9	26.5
Multifamily mortgages	6.7	.1	2.4	9.2
Total	$257.9	$5.9	$14.7	$278.5

Over 95% of the total single-family mortgage portfolio is owner occupied and 79% had original loan to value ratios of 80% or less. The remainder have loan to value ratios between 80% and 95%, as required by Freddie Mac's charter, all of these have credit enhancements, often including mortgage insurance.

Delinquency and real estate owned (REO) rates on these single-family fixed rate (SFFR) mortgages have remained relatively constant at a low rate over the past several years. Freddie Mac has a geographically diverse portfolio. Loan purchase concentrations are not significantly different than population distributions by state, with the exception of California which comprises just over 20% of mortgages purchased.

Single-family adjustable rate mortgage loans (ARMs) which make up over 9% of Freddie Mac's portfolio of purchased loans, increased over the past three years due to the demand for adjustable rate products. Substantially all ARMs are owner occupied. Nine percent of the ARMs have LTVs of between 90% and 95%, 24% have LTVs of 81% to 90%, and 67% have LTVs of 80% or less. Credit enhancements are required on ARMs with LTVs of greater than 80%. The northeast, southeast, and west regions together originated almost 85% of the loans purchased. Both REO and delinquency rates for ARMs have both declined slightly over the past three years but still run higher than single-family fixed rate mortgages.

Multifamily loans purchased since inception by Freddie Mac totalled over $10 billion (as of September 30, 1989, multifamily servicing represented 3% of the portfolio). Although the amount of multifamily loans has remained relatively constant over the last three years, the REO and delinquency rates for multifamily loans increased rather significantly during the same time period. The multifamily loans have LTVs of 80% or less in over 90% of the cases with substantially all of the rest in the 80% to 90% LTV range. The northeast region originated nearly 50% of the multifamily loans purchased by Freddie Mac while the remaining 50% was spread throughout the country.

Recently, as a result of the higher default rates noted in the multifamily portfolio, Freddie Mac has decreased the maximum LTV acceptable from 85% to 70% and now requires credit enhancement for all multifamily mortgages with LTVs over 60%.

Freddie Mac's on-balance sheet portfolio of $21 billion includes $5.9 billion of loans pledged for or financed by multiclass debt securities. The retained portfolio consisted of 78% single-family fixed rate loans, 16% multifamily loans and 6% ARMs. The product mix of retained portfolio has remained relatively constant over the past three years.

Freddie Mac as Insurer

Given the aforementioned portfolio and associated risks, Freddie Mac can be viewed as an insurance enterprise which underwrites guarantees against credit defaults on pooled mortgage securities. In exchange for writing such insurance, Freddie Mac receives premium income in the form of a spread equal to about one quarter of one percent between the cash flows it receives on the mortgages and the cash flows it passes on to security holders. In addition Freddie Mac generates a significant level of income from float. Thus Freddie Mac's primary risk is whether the stream of premium income plus float, combined with existing capital, can sustain expected losses on its guarantee contracts. Indeed this is ***the*** main question to be addressed in this study. But it is not the only issue, as Freddie Mac's operations must be viewed with the following additional considerations in mind:

- As a federally chartered government corporation the capital markets view the Freddie Mac guarantee as an extension of an implicit federal government guarantee; i.e., that the federal government will not allow Freddie Mac to fail and default on its guarantees. This "implicit" guarantee further reduces the ultimate cost of home financing. It should be noted, however, that Freddie Mac's cost of raising funds is still higher than those agencies, e.g., GNMA, which carry explicit federal guarantees.

- Freddie Mac's financial operations extend beyond the simple pass through operation. There are assets held on its own account for which Freddie Mac is exposed to liquidity, credit, and interest rate risks.

- Freddie Mac's portfolio encompasses in excess of five million mortgages spread throughout the country. These mortgages are originated by over 5,000 seller/servicers. This enormous span of operations demands a reliance on a mortgage origination, underwriting and control process of significant proportions. Controls over this entire process are crucial to ensuring that only loans which meet the credit risk standards of Freddie Mac are purchased.

The first item above is the reason Congress directed GAO and Treasury to study the adequacy of Freddie Mac's capital. The second two items relate to additional risks in the program that must be considered.

Distinguishing the Risks at Freddie Mac from those of Failed Government Programs

As noted in the introduction to this report, the underlying concerns of Congress and others stem from the large-scale failures of financial institutions, primarily thrifts and ultimately the thrifts' deposit insurance underwriter, FSLIC. Accordingly, it is instructive to understand what caused that failure (and what did not) and identify which of those features apply to the operations of Freddie Mac.

The GAO Study of Thrift Failures

There have been numerous studies by Congress, FDIC, FSLIC and private concerns that have sought to evaluate why the thrift crisis occurred. Our analysis begins with the conclusions of these studies, one of the more pertinent of which was the June 1989 GAO issued *Report to Congress - Thrift Failures*. This study was based on an extensive study of the financial history of 52 thrift institutions during the 1980's and the regulatory oversight procedures employed at those institutions during that same period. Half of the thrifts in the study were insolvent institutions which comprised losses to FSLIC totalling over $10 billion.

GAO's report highlighted the following four items which principally contributed to the failure of these individual thrift institutions and ultimately FSLIC:

- Fraud, Insider Abuse, Disregard of Safety and Soundness Rules - Indications of fraud, insider abuse and disregard of the safety and soundness rules existed at virtually ***all*** of the failed thrifts.

- Nontraditional Lending Risk - Virtually ***all*** the failed thrifts ***changed*** from traditional home mortgage lending to higher-risk activities such as acquisition, development and construction lending as permitted under federal and state deregulation.

- Regional Economic Risk - Poor ***regional*** economic conditions exacerbated the problems of the failed thrifts, since most of these thrifts invested in a limited geographic area.

- Weak Oversight and Regulation - Regulatory actions occurred too late to head off the massive losses in the troubled segment of the thrift industry.

Also mentioned in the GAO report and other studies were the following additional factors contributing to failure:

- Weak Controls - Virtually ***all*** the failed thrifts had serious internal control weaknesses which existed in various aspects of the thrift's operations. Perhaps most importantly, these deficiencies included the most vital of financial institution controls - those surrounding credit underwriting and monitoring. But deficiencies also extended to more rudimentary aspects such as maintenance of accounts and reconciled accounting records, liberal accounting to inflate reported income, maintaining inadequate loss allowances, and ineffective independent audits of activities.

- Excessive Lending to Single Borrowers - Most of the failed thrifts violated Federal Regulations regarding concentration of credit extended to a single borrower.
- Excessive Compensation to Insiders - Most of the failed thrifts paid excessive compensation to officers and directors.
- Liquidity Risk - Most of the failed thrifts exposed themselves to a high degree of liquidity risk by soliciting volatile deposits in the form of jumbo (greater than $100,000) certificates of deposit.

The various reports also discuss two other risks which have been important to the industry's trouble:

- Interest Rate Risk - While only briefly mentioned in the GAO report, but discussed in many other studies, interest rate risk is clearly an issue which all financial institutions face and was a major factor in both the significant number of thrift failures in 1979 to 1981 and the subsequent move to deregulate asset powers to permit thrifts to diversify into higher risk areas.
- Premium Pricing Risk - The price of FSLIC's insurance coverage was insufficient to cover the possible cost of the risks it was underwriting and was not risk-related which resulted in excessive risk taking by many thrifts.

It should be noted, however, that ***none*** of the reports indicated that thrift failures were the result of the credit risk associated with one-to-four family mortgages with low loan to value ratios, i.e., the core of Freddie Mac's business. Further, what is clear from the reports is that the attributes of these troubled thrifts do not exist in any fashion at Freddie Mac.

Capital

To assess capital adequacy, it is first necessary to understand what is capital. In some measure the definition of capital is found in its purpose. Capital exists to protect an entity from sustained losses due to operational risks. Capital in its simplest sense is the total investment of a company in itself and can be measured by subtracting the liabilities of a company from its assets. At times this measure of capital is insufficient because certain assets do not fulfill capital's purpose of protecting against loss. For instance goodwill, the amount paid in excess of the book value of an institution upon its purchase, does not provide any cover against losses.

For any organization there are also items which can make the entity more or less valuable than the book value of capital. For Freddie Mac the value of future guarantee fees from existing securities are not reflected in traditional GAAP capital, but they will certainly have an impact on future income streams. Likewise the general current level of income has an impact on capital growth; the fact that Freddie Mac is currently realizing close to half a billion dollars in income per year, and that most of this income is in cash, certainly reduces the risk of capital depletion.

As a result, for a financial institution it is often considered appropriate to use marked-to-market financial statements rather than conventional GAAP basis financial statements to derive an appropriate measure of capital. Freddie Mac prepares both GAAP and marked-to-market financial statements. At September 30, 1989, on a GAAP basis the capital of Freddie Mac was $1.8 billion; on a marked-to-market basis the capital was $5.0 billion (excluding the economic impact of any tax liability on the step up in values from GAAP to marked-to-market). The difference between GAAP and marked-to-market capital is substantially all attributable to servicing rights not recorded for GAAP purposes. Purchased servicing rights, for regulatory (FIRREA) capital purchases can be included in the capital calculation. Since Freddie Mac's "securitization process" much resembles the purchase of servicing rights, use of the $5.0 billion marked-to-market equity seems justified for capital evaluation purposes. With regard to the tax effect associated with the step up to $5.0 billion, we believe that any tax impact would be negated by tax loss benefits realized if the corporation needed to deplete the $5.0 billion in capital because of losses. For purposes of evaluating capital adequacy we have used the marked-to-market capital of $5.0 billion.

What is Capital Adequacy

The adequacy of capital is a subjective evaluation related to an individual organization. Capital adequacy is impacted by and is dependent on the business an organization is engaged in, the risks it takes and the manner in which it conducts and controls operations.

In a sense, capital adequacy is, like beauty, in the eye of the beholder. At the same time there are key techniques which have been used to assess capital adequacy and which need to be considered in this study:

- Credit rating tools; and
- Industry capital standards or requirements.

Credit rating tools, primarily stress test models, are one of the key tools we have used in the study. Of course, Freddie Mac itself does not have a credit rating because credit ratings are influenced by the implicit government guarantee. This guarantee turns Freddie Mac into a "riskless" investment. The model is designed to use methods developed by rating agencies to determine credit worthiness.

Price Waterhouse has reviewed the analysis conducted by Freddie Mac to assess the adequacy of their capital reserves against various outside criteria. In this section we discuss this review. The section is organized as follows:

- ☐ Credit Rating Approach to Capital Assessment
- ☐ Capital Standards

Credit Rating Approach to Capital Assessment

One approach in assessing Freddie Mac's capital adequacy is to follow the methodology employed by bond rating agencies. In the process of developing bond ratings, agencies assess the adequacy of the capital (equity) buffer between bondholders and the bankruptcy courts. The capital buffer is necessarily viewed in light of the risks specific to the company/industry being reviewed. Thus when agencies develop a bond rating, they also implicitly assess the capital adequacy of a firm.

Because Freddie Mac is essentially an insurer of mortgages, the credit rating approach reflects this methodology for issuing bond ratings for private mortgage insurers. This methodology is applied through a stress test using a most detrimental scenario to determine how long an insurer (Freddie Mac) would survive in a Great Depression scenario. It is appropriate for Freddie Mac in that a depression-type scenario (one characterized by prolonged deflation in home prices, very low interest rates, and high levels of unemployment) is probably the most stressful economic scenario one could envision for Freddie Mac. The low interest rates of a depression would increase prepayments of fixed rate mortgages and the higher unemployment and other factors cause higher default rates because of declining equity values. Both would have an impact on Freddie Mac's income stream. The opposite scenario, a high interest rate stagflation case, is less stressful for two reasons. First, its portfolio principally consists of fixed rate mortgages which are less likely to prepay. While high interest rate levels do translate into increased credit risk in adjustable rate loans, this is somewhat mitigated by the fact that ARMs are a relatively small portion of the portfolio.

In reviewing Freddie Mac's capital adequacy from a credit rating agency view point, Price Waterhouse studied all of the economic models employed by Freddie Mac's Financial Research staff to project operations and cash flows (particularly default and prepayment behavior) under depression conditions. Below we discuss our review of the economic and financial models used and the applicability of the stress tests applied. A summary of capital adequacy findings concludes this section.

Economic and Financial Models used to Analyze Capital Adequacy

The Freddie Mac economists have developed sophisticated analytical tools to explain default and prepayment behavior of the borrower. These tools permit them to simulate the impact on Freddie Mac's capital by projecting expected default, prepayments and losses for loans in their portfolio under adverse economic conditions. Their models follow an options pricing approach to characterize and explain default and prepayment behavior of mortgage holders. These statistically estimated models are used to simulate default and prepayment rates under conditions that will be outside the range of their test period. Below we discuss the general methodologies employed.

An Options Pricing Model to Explain Default and Prepayment

Summary of Methodology

The options pricing approach followed by Freddie Mac views borrowers as making decisions about their mortgage obligations so as to maintain an optimal house wealth position. Mortgage holders in servicing their mortgage obligations have three basic options: 1) pay as scheduled, 2) prepay the entire principle amount, or 3) default. The decision to exercise any one of these options will be made based primarily on the equity position in the property relative to the value of the mortgage. Distinctions are made for the borrowers' decisions when modeling default, prepayment, single-family versus multifamily, and ARMs.

- Default Model - The default model is specified to estimate directly conditional probabilities of default for selected categories of cumulative home equity appreciation including: 1) equity less than -10%, and 2) equity between -10% and +10%. The analysis presumes that properties with equity in excess of 10% will not default. The equity position in the home will be determined by the initial Loan-to-Value ratio (LTV), the extent of market appreciation in the property, the market value of the mortgage, and transactions costs associated with default. By estimating equity appreciation over time for individual properties, the model enables a direct estimate of conditional default probabilities and an estimate of the volume of defaults for a portfolio of mortgages.

- Prepayment Model - The prepayment model incorporates a similar model specification to estimate the number of prepayments for specified categories of cumulative equity appreciation. The determinants of equity appreciation follow from those stated above. In modeling prepayment behavior, only when the property reaches a significant positive equity level are borrowers expected to consider a prepayment option. The analysis conducted by Freddie Mac estimates a conditional probability of prepayment for equity appreciation in excess of +15% and assumes no prepayment for equity less than +15%. Prepayment behavior is expected to be sensitive to downward movements in interest rates as rational borrowers will refinance a mortgage following a significant reduction in the prevailing mortgage interest rate. Changes in interest rates will alter the perceived mortgage value to the borrower measured as the discounted value of the future stream of payments. The conditional probability of prepayment is specified as a function of the borrower's valuation of the mortgage such that a fall (increase) in interests rates will decrease (increase) the mortgage value and increase (decrease) the default probability.

- Single-family versus Multifamily - A distinction is also made in the model between single-family and multifamily unit borrowers. The multifamily unit borrower is presumed to be non-owner occupied businesses that will respond differently to owner's financial position in the property. Their actions will differ according to their expected transactions costs (eg., nonresident owners are not forced to relocate) and the tax liabilities of defaulting. These borrowers will consider the tax liability implications (in default the remaining loan balance is viewed as the sale price in calculating capital gains) in their default decision and as such are presumed to consider default only if the equity falls below the implied tax liability. The analysis further assumes that the conditional default probability equals one when the equity remains below the implied tax liability for two years. The multifamily unit mortgagor is presumed to be quicker to refinance following a reduction in their mortgage valuation associated with significant drop in the prevailing mortgage coupon rate.

- Adjustable Rate Mortgages - No separate model is developed to estimate the conditional probability for ARMs, which represent only 3% of the portfolio, or 15 year SFFR. The projection of defaults for ARMs and 15 year SFFR are made from the estimated SFFR default model. For the original period of estimation, 1960-78, there was no ARM data available. Further, it is viewed that the basic default model covers sufficiently diverse experiences in default incidence to not warrant any modification to the model.

Separate models are developed to estimate the conditional probability of default and prepayment for each of single and multifamily mortgage holders. The single-family equations include 30-year, 15-year, and ARMs. These models are then used to simulate and forecast numbers of defaults and prepayments under specified economic conditions. To forecast defaults it is necessary to estimate the average equity appreciation and dispersion of property values about the mean to establish an approximate distribution of property values in the selected simulation or forecast period. The number of defaults and prepayments are computed from the number of properties that fall into the defined equity categories times their estimated probability of default or prepayment.

Assessment

The default and prepayment models used by Freddie Mac to assess capital adequacy are based on sound economic reasoning that incorporate accepted theories to describe the behavior of mortgagors. There is some concern, however, as to the application of the estimated results in simulating default and prepayment behavior.

- ❑ Applicability of FHA data in the 1960s and 70s - These estimated coefficients represent conditional probabilities of loan default when the equity in the home falls into the associated class. These estimates characterize the expected default probabilities for FHA portfolio of loans in the 1960s and 1970s. (Based on FHA default experience reported in the Foster and Van Order paper [1984] in *Housing Finance Review)* The use of FHA data could be beneficial for a Freddie Mac analysis in that it provides a broader base of mortgage experience. The FHA experience was characterized by defaults ranging from 5-10% except in the early 60s when default rates reached 15%. In addition, the FHA portfolio has a concentration of loans with LTVs in excess of 90% and home values considerably below median home prices. In general, the FHA loan portfolio contains much riskier business to insure. In contrast, the Freddie Mac loan portfolio contains loans with average LTVs much below 80% that have historical default rates significantly below the FHA experience. The Freddie Mac analysis implicitly assumes that the performance of the current loan portfolio will be comparable to the FHA experience in the 1960s and 1970s. The current FHA loan portfolio is experiencing higher default rates than in this period. The plausibility of this assumption must be considered with respect to the similarity of the loan portfolios at origination or in depression and changes in general economic conditions. Observed differences in historical default rates between the two portfolios, perceived changes in borrower default behavior and differences in underwriting standards raises concern about the transferability of the estimated default probabilities to the current FHLMC portfolio.

- ❑ ARM Model - In the Freddie Mac capital adequacy analysis the estimated default probabilities for SFFRs were used to simulate ARM defaults. It is expected implicitly that ARMs will perform in the same way as the SFFRs. For the period in which the default and prepayment models were estimated adjustable rate mortgages did not exist. ARMs were not introduced in any significant number until the mid 1980s and have varied considerably in their product design. The ARM inherently builds additional risk for the mortgage borrower because debt servicing obligations will rise with increases in the periodic adjustment of the mortgage contract rate. The ARM performance to date for Freddie Mac demonstrates consistently higher default incidence than for SFFRs in recent years.

The estimates of default probabilities in the regression are dependent upon the underlying distribution used to construct the home equity values. It is not expected that property appreciation and the distribution of home values will differ between ARM and SFFR financing. If the historical experience indicates that ARMs have higher default incidence than SFFRs, then for comparable equity dispersions one should expect to estimate higher ARM default probabilities for each of the constructed equity categories. Therefore, using the originally estimated default model to simulate ARM default experience will understate the extent of losses from this portion of the portfolio, although this is likely to be mitigated since ARMs, in a Great Depression scenario with falling interest rates, will be less stressful to borrowers.

Simulation Model to Project Default and Prepayment Rates and Loan Losses

While the option-based model discussed above fits well over its estimation period, a better test of the model's robustness is found in its ability to simulate "out of sample" periods, i.e., conditions not contained in period estimated. This section reviews the Freddie Mac analysis used to simulate the model and compare predicted results with actual experience for default and prepayment experience for the years 1986-89 and the cumulative default experience to date for the 1981-82 loan origination years in the Southwest region.

Summary of Methodology

An ex-post simulation analysis was conducted to evaluate the forecast performance of the default and prepayment models for each of the products. Using the results of the estimated default and prepayment models to simulate and compare the FHLMC default and prepayment predictions with actual experience gives an indication of the forecast reliability of the models. This type of exercise is valuable in assessing the predictive power of a model under alternative economic conditions outside the period of estimation.

Separate exercises have been conducted for the US market in aggregate during the late 1980s representing a period of economic expansion coupled with generally falling interest rates. A second exercise was carried out to project subsequent default and prepayment rates and compare with actual experience for the US in aggregate, Southwest region, Texas, and selected cities of Dallas and Houston for loan origination years of 1981-82.

The predictive ability of the model will be affected by the forecasts of the input factors to the model plus the consistency of the underlying economic structure. For an ex-post forecast analysis these input variables are known generally with near certainty. Therefore, errors in the forecast simulation of this type can be attributed to the stochastic nature of the model and/or to changes in the underlying economic structure.

The input factors to the default and prepayment models are calculated estimates of individual home values taken from constructed indices of average home appreciation and estimated dispersions about an average price level. Freddie Mac has investigated several different indices as part of their analysis. For this ex-post simulation exercise errors in forecast performance can be attributed to inappropriate selection of a price index to estimate individual home value appreciation in addition to the sources of error identified above. Therefore, the forecasting ability of this model is expected to be sensitive to the assumptions underlying the construction of the estimated average home equity appreciation and distribution about this mean.

- ☐ Housing Price Index and Price Dispersion - Price indices are generated using either of two methods: 1) a weighted repeat sales (WRS) methods calculated from housing data taken from the FHLMC loan portfolio, and 2) the Census Department's constant quality price index.
- ☐ Computing Current Equity Value of FHLMC Portfolio - Individual home equity values are estimated from price indices generated using the WRS or the constant quality procedures. Each year home values change by the average growth in house prices plus a stochastic dispersion.

Results of Simulation

The simulation exercise demonstrates that the Freddie Mac models predict reasonably well under certain home price appreciation assumptions the recent experience of default and prepayment for selected products. Specifically, when the Freddie Mac repeat sales price index is used to distribute equity values for this period the model simulates very well for SFFR in each of the years. The multifamily loans predict well when the Census Dept constant quality index is applied to estimate equity values. Finally, for the ARM products neither index provides an adequate means to establish home values to predict default. In all cases the model underpredicts the ARM default experience.

These results suggest that the methodology can serve as a reasonable means to project default experience for selected product lines. Single-family and multifamily, together, represent over 90% of their loan portfolio so that under average economic conditions and with proper judgment on the part of Freddie Mac analysts their models can be expected to perform well. However, these results are sensitive to the selected price index. Freddie Mac has asserted that their new index is more indicative of the recent experience of their portfolio. However, only the results of the SFFR analysis support this position.

In contrast, the ARM performance indicates that the model does not describe the behavior of these mortgagors. Although this product has not been a significant part of the portfolio, Freddie Mac increased its purchase of ARMs in the first half of 1989. During the second half of 1989, ARM purchase volume decreased from levels experienced in the first half of the year. While ARM purchases are currently declining, further analysis is still warranted by Freddie Mac to better understand the ARM borrower's behavior.

In carrying out the prepayment simulation exercise the results indicate that SFFR prepayment projections track very well with experience when using the WRS price index. The multifamily projections tend to consistently overpredict for tests using either the constant quality index or the WRS price index. The models significantly underpredict the ARM under all tests. The results indicate that the model performs well only for Freddie Mac's dominant product line of SFFR.

The simulation exercise to predict default rates for the loan origination years 1981-82 representing a period with unusually high default rates both across the US and specifically in the Southwest region indicate that the model is able to generate the expected surge in default rates. Assumptions reflective of expected price declines in a depression are used to evaluate how close the Southwest region behaved like the Great Depression. However, in simulating the Texas experience the models consistently overpredict actual defaults. This analysis suggests that either the Southwest market did not behave like a great depression or there is considerably more uncertainty about how the model performs under high stress conditions. The consistent overprediction presents a conservative view of the likely impact of default behavior in an adverse economic environment.

Projecting Financial Income and Cash Flows

In order to relate the default and prepayment models to the overall capital adequacy of Freddie Mac, these underlying models are linked to pro forma financial statements. Using this interface to the financial condition of Freddie Mac, the effect of various default assumptions on capital can be tested.

While perhaps the more important determinants of capital adequacy are the default, prepayment, and loss rates that come from the economic model, the assumptions in the financial model determine the bottom line effect on capital position. In general, Freddie Mac uses very conservative assumptions in simulating the financial model. A discussion of the important financial assumptions and the interaction of the economic and financial models follows:

- New business and fee income - The financial model assumes that in the depression scenario, no new business is undertaken. This relatively conservative position has the effect of reducing fee income from what it would have been with new business. A more realistic scenario would include additional business. Associated with a fall in interest rates during the depression scenario, there should be opportunities for a significant volume of new business during the early years. However, any lag in the relationship between Freddie Mac's pricing and its estimates of default cost would translate to undertaking risky new business that will generate additional losses in the depression. Thus while the assumption of no new business is probably on the conservative side, there is a worse scenario under which additional low quality business is booked.

- ❑ Prepayments and fee income - While fee income is restricted by the assumption of no new business, more prepayments in the depression scenario further reduce fee income. In the economic model discussed above, lower interest rates in the depression scenario lead to increases in prepayments. In the financial model, these prepayments reduce the portfolio and consequently reduce fee income.

- ❑ Default losses - The most important driver in the depression scenario are default loses. Because of the decline in home prices assumed in the depression scenario, many more borrowers have low or negative equity in their homes. This causes much higher default losses and a corresponding reduction in net income.

- ❑ Float income - Float income is generated by the lag between the remittal of monthly P&I payments to Freddie Mac and the payment to PC holders. In the financial model, float income falls during the depression scenario as interest rates decline and the sold portfolio shrinks. This is offset by an increase in float base due to an increase in prepayments.

- ❑ Interest on Retained Portfolio - With the fall in interest rates during the depression, Freddie Mac's mostly fixed rate retained portfolio increases income due to the wider spread versus short-term liabilities. However, Freddie Mac's retained portfolio makes up only a small part of the overall portfolio, and any increase in the spread on the retained portfolio are mitigated by increased defaults.

- ❑ Private mortgage insurance - An important element of Freddie Mac's operating strategy is the requirement that mortgage insurance be carried on mortgages with LTV's above 80%. These PMI's act as an important buffer that reduces Freddie Mac's loss rate. In the financial model, the PMI's are assumed to remain in business only as long as predicted by their Moody's rating. Thus a PMI with an "A" rating is assumed to last 5 years. When the PMI's go bankrupt, Freddie Mac's loss rate increases accordingly. The one caveat in this assumption is that the PMI's are assumed to be represented in Freddie Mac's portfolio in the same ratio as their market share. It would be appropriate to use the actual portfolio representation of the PMI's, although this data is apparently not available.

- ❑ Dividends - During the depression scenario it is assumed that zero dividends are paid out. While this is a realistic assumption well into the depression, management's decisions following a slowing of the economy and after an initial recession would likely follow a course of taking on new business and maintain some dividend payout.

- ❑ Off-balance sheet items - At the end of the depression scenario, a significant amount of off balance sheet PC's remain. The assumed value of these off-balance sheet assets is zero. However, these PC's would have some residual value. This residual value could be a positive value from the stream of fees but could also be a negative value due to future defaults beyond the ten year horizon.

- Recourse - Although Freddie Mac has recourse (like a warranty, the ability to put a mortgage back to the lender if there are material underwriting deficiencies) provisions on almost all of its mortgages, it is conservatively assumed that these are not exercised during the depression scenario. This is a reasonable but conservative assumption predicated on given the likely poor condition of many lenders during the depression scenario.
- Administrative expenses - Administrative expenses are assumed to decline somewhat due to the decline in new business. However, the increase in default and foreclosure activity tends to mitigate this decline.

Stress Tests Applied to Evaluate Capital Adequacy

In the previous section, we discussed: 1) the validity of the estimated default, prepayment, and loss rate equations, 2) the simulation ability of this model over recent history and in Texas, and 3) the financial model and its assumptions. Based on our review in these three areas, Price Waterhouse believes that the estimates produced by this model reasonably reflect the likely default, prepayment, and profitability characteristics of the dominate business comprising SFFR and multifamily of Freddie Mac in response to external economic conditions.

Using these models, Freddie Mac's capital adequacy can be analyzed by subjecting the firm to stress conditions. As discussed earlier, the two major external threats to a secondary mortgage market firm are interest rate risk and default risk. A discussion of how Freddie Mac would fair under each of these conditions follows.

Interest Rate Risk - The Stagflation Scenario

Although many of the problems with the S&Ls in the early 1980s can be traced to interest rate risk (S&Ls were caught holding long- term fixed rate mortgage assets when the rates on their short- term liabilities skyrocketed in the early 1980s), Freddie Mac is relatively immune to this problem. Approximately 95% of Freddie Mac's portfolio consists of off-balance sheet Participation Certificates -- and these PCs allow Freddie Mac to pass the interest rate risk directly to investors. Thus, subjecting Freddie Mac to a hypothetical "stagflation" scenario of high interest rates and high inflation does not erode their capital base -- they easily survive beyond ten years, the period used by Moody's for an Aaa rating. Freddie Mac's capital is adequate for the stagflation scenario because 1) interest rate risk is passed on to investors, and 2) housing inflation allows homeowners to build equity and reduce default and loss rates.

Credit Risk - The Great Depression Scenario

Although Freddie Mac is relatively immune to interest rate risk, the credit risk posed by a depression-like deflation is a more stressful economic scenario. As discussed in our review of the financial model, a depression scenario brings two troubles to Freddie Mac's balance sheet: a higher default and loss rate as homeowners lose equity in their homes, and lost fee income as mortgage holders prepay due to lower interest rates.

In order to assess Freddie Mac's capital adequacy under a depression, the Freddie Mac's Financial Research staff simulated performance during a ten year period with economic conditions similar to those of the Great Depression. This distress scenario, shown below, is Freddie Mac's understanding of the scenario used by Moody's in its evaluation of private mortgage insurers.

Year Age	Mean % Change in House Prices	Short-term Interest Rate	Mortgage Rate
1990	0.0%	8.0%	10.0 %
1991	-10.0	7.0	8.5
1992	-10.0	6.0	7.5
1993	-10.0	4.0	6.25
1994	-10.0	3.0	5.0
1995	0.0	3.0	5.0
1996	1.5	3.0	5.0
1997	3.0	4.0	6.0
1998	3.0	4.0	6.0
1999	3.0	5.0	7.0

The simulations start with Freddie Mac's GAAP capital position as of December 31, 1989 (projected from third quarter 1989 actual results).

Results

Under a range of sensitivity assumptions in the areas of transaction costs for disposal of property and loss on sales, Freddie Mac "survives" the Great Depression scenario for a period of between 8-12+ years. Using the base case historical models reviewed above (with model generated loss rates, prepayment rates, and transactions costs at 10%), Freddie Mac has enough capital to survive more than 12 years of the depression. This survival period is consistent with an "Aaa" credit rating for Moody's.

Under more stressful sensitivity conditions characteristic of a depression (increasing estimated transactions costs by 50% and assuming higher loss rates on sale for the entire ten-year period), Freddie Mac remains financially solvent for eight years. This would suggest an "Aa" rating. For an intermediate sensitivity case (assuming 50% higher transactions costs and an abnormally high loss rate for the first three years) Freddie Mac lasts just past ten years in the forecast scenario.

Comparison to Stress Tests Done in 1987 and 1988

Although in Freddie Mac's depression stress test the firm remains solvent for 8-12 years, there is still a degree of uncertainty in these numbers. A second method of reviewing the current capital adequacy of Freddie Mac compares the results of the stress test performed based on the year-end 1989 financial position to results taken from the financial position at the end of the previous two years.

Freddie Mac's capital adequacy position has strengthened over the past few years for two main reasons. First, the primary capital ratio has risen from .65% at December 31, 1987 to .80% at December 31, 1989. This rise is due to an increase in capital from stock conversions and retained earnings, as well as a slowdown in portfolio growth from the 1986-1987 refinancing peaks. The second reason that Freddie Mac's capital adequacy position has strengthened is that the large number of loans booked in the 1986-1987 period have seasoned. This seasoning of the portfolio (LTV for the portfolio is currently estimated at about 54%) means that loans are less likely to default when put through the depression scenario.

The strengthening in Freddie Mac's capital position is depicted in the table below. This tables shows how many years Freddie Mac survives the depression scenario.

Year	Years of Solvency	Implied Credit Rating
1987	5	A
1988	9	Aa
1989	10 (1)	Aaa

(1) Based upon third quarter 1989 [illegible]al results.

The sensitivity analysis suggests that Freddie Mac would last 8-12 years based on its year-end 1989 financial position; comparison to past years using the same model assumptions shows the strengthening in Freddie Mac's capital position.

Summary Assessment of Freddie Mac Capital Adequacy Based on Model

In reviewing Freddie Mac's ability to survive a depression- like scenario - we have implicitly selected a single modelling test of capital adequacy. However, to the extent that a depression represents the most troublesome scenario to Freddie Mac (given their relative insensitivity to the interest rate risk of a stagflation scenario), this assessment serves as a good benchmark for determining capital adequacy in relation to other mortgage/insurance market participants.

Our review of Freddie Mac's capital adequacy model covered four areas: 1) the estimated default, prepayment, and loss rate models; 2) the recent simulation experience of these models; 3) the financial assumptions linking these models to accounting statement capital, and 4) the forecasts of these models in a depression environment. In our review of the modeling of Freddie Mac's capital adequacy, several points lend support to Price Waterhouse's conclusion that the models provide an accurate assessment of capital adequacy (and that Freddie Mac's capital is adequate considering their economic risk situation). These main supporting points are discussed below:

- Widely Accepted Theoretical Model - The use of an options based model for estimating mortgage default and prepayment is widely accepted in academic and business circles. Most studies of default behavior view Loan-to-value ratio (amount of equity in the home) as the key predictive variable. Freddie Mac's models are based on these sound theoretical underpinnings. Within the estimation period, these models are able to explain approximately 90% of the variation in mortgage default behavior.

- Quality Research Staff - In addition to using accepted theory as a basis for the capital adequacy models, Freddie Mac's Financial Research staff is recognized as one of the strongest in the default and prepayment modeling areas. The staff is widely published and recognized as experts in this area.

- Model Simulates Well in 1980s - In addition to fitting the data well over the 1960s and 1970s, the default and prepayment models simulate reasonably well over the recent period 1986-1989. During a period with significant turmoil in regional real estate markets, these simulations results support the conclusion that Freddie Mac's strategic emphasis on tight credit screening, safe LTV policies, and a single-family portfolio have kept their default rate easily manageable and predictable.

- Model Overpredicts the Texas Experience - At our request, a further test of the forecast performance of the default equation in use was conducted by Freddie Mac to evaluate its ability to predict default in Texas. In these simulations, the model overpredicts defaults, suggesting both that the Texas experience may not have been as bad as the Great Depression scenario and that the model's depression predictions may actually be somewhat pessimistic.

- Depression Scenario Projects an Aa or Aaa Rating - Given that one accepts the assumptions and abilities of the capital adequacy model to predict default, prepayment, and loss behavior, the strongest supporting point for an assessment that Freddie Mac's capital *is* adequate comes from projections under the Great Depression scenario. Under a range of sensitivities, projections of Freddie Mac's capital adequacy in a depression suggest that the firm would last from between 8 to 12 years. This is consistent with a top tier credit rating from national debt rating organizations.

Although Price Waterhouse is satisfied that the model presents a realistic assessment of Freddie Mac's capital adequacy, we identified several areas during our review of the model that require attention. These matters caveats are summarized below:

- Model Estimation Period Needs Updating - The most important area of concern raised during our review of the model is that it was estimated based on Federal Housing Administration (FHA) data over the period 1960- 1978. Although the high LTV characteristics of FHA data may better represent possible depression scenarios, Freddie Mac should re-estimate the equations using current Freddie Mac experience. It is Price Waterhouse's understanding that database has been expanded recently, allowing Freddie Mac to begin re-estimating the model in the near future.

- ARM and Multifamily Equations Require Constant Updating - Although ARM and multifamily mortgages make-up approximately 12% of Freddie Mac's portfolio, problems in the model's specifications for these mortgage-types will require attention. This is particularly true if ARMs, with their apparently higher default rates, become a larger portion of the overall portfolio.

- Assumptions Concerning New Business Policies and PMI Failures During a Depression Require Review - Review of the financial model highlighted two concerns. The assumption that no new business is written under the depression scenario raises concerns that, in actuality, new business might be booked during the early years of a downturn -- and that these mortgages might be underpriced and incur losses. A second concern is that Freddie Mac uses market shares to estimate the portion of their portfolio represented by various Private Mortgage Insurers (PMI's). Given the importance of mortgage insurance in protecting Freddie Mac's losses, better tracking (perhaps by sample) of the financial strength of their PMI's is warranted. Freddie Mac will be collecting loan level mortgage insurance data beginning in April 1990.

- Depression Scenario Remains "Out-of-sample" - Although the depression scenario projects that Freddie Mac's capital will last approximately 10 years, no one really knows how the economy and mortgage holder will react. The deflation estimates used in the scenario are well outside of the data range for any available data sample. There is an inherent uncertainty in trying to make predictions for conditions not contained in the estimation period for the equations.

- Model Requires Improved Documentation - A final concern resulting from our review is that model documentation needs improvement. Because of the importance of these models in Freddie Mac's capital structure and pricing decisions, there should be better documentation.

Capital Standards Evaluation

Capital standards exist for two industries which have a superficial resemblance to Freddie Mac; thrifts and mortgage insurers. As noted earlier in this report, however, there are significant differences between Freddie Mac and those institutions and, as a result, evaluations using those tests are only of limited value. However, in order to positively address these standards we have applied those standards to Freddie Mac and assessed the results.

Thrift Standards

The Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) developed three capital standards for savings associations. The important features of the capital requirements are:

Tangible Capital Requirement

Tangible Capital >= 1.5% of Tangible Assets

Tangible capital is the strictest definition of capital. It is common stockholders' equity (including retained earnings), noncumulative perpetual preferred stock and related surplus, qualifying nonwithdrawable accounts and pledged deposits, minus intantible assets.

Tangible assets total assets calculated according to generally accepted accounting principles minus intangible assets such as goodwill plus a portion of purchased mortgage servicing rights.

Core Capital Requirement

Core Capital >= 3% of Tangible Assets

Core (tier 1) capital is tangible capital plus some qualifying supervisory goodwill (no more than 1.5% of tangible assets). Over time the amount of goodwill includable in core capital is phased-out. By January 1, 1995, core capital will basically equal tangible capital.

Supervisory goodwill is the premium a thrift paid for an insolvent or problem institution in a merger or acquisition.

Risk-Based capital Requirement

Total Capital >= 6.4% of Risk-Weighted Assets (80% of 8%)

Total capital to protect against portfolio risk is core (tier 1) capital plus supplementary (tier 2) capital.

Supplementary (tier 2) capital includes qualifying subordinated debt, cumulative perpetual preferred stock, capital certificates, nonwithdrawable accounts and pledged deposits not included in core capital, and general valuation allowances. Supplementary capital cannot fulfill more than half of the total capital requirement.

Risk-weighted assets are total assets plus some off-balance-sheet items after each asset or item has been multiplied by the appropriate risk weight set forth in the regulation. Some key risk weightings are:

- Cash and obligations backed by the full faith and credit of the U.S. Government are carried at no risk and are weighted at 0%;
- A 20% risk weighting for claims on guarantees of U.S. Government-sponsored agencies;
- A 50% risk weighting for conventional mortgages on 1 to 4 family residences;
- A 200% risk weighting for repossessed assets, certain significantly delinquent loans and some equity investments; and
- A 100% risk weighting for substantially all other assets.

Application of Thrift Standards

The use of the tangible and core capital standards, since they deal only with assets and liabilities reflected in the financial statements, reflect a significant capital excess over requirements when measured against either GAAP or marked-to-market capital. However, because Freddie Mac retains the credit risk related to the mortgages passed through which are not reflected in the financial statements (the largest portion of Freddie Mac's business), these two capital adequacy tests are essentially meaningless to an assessment of Freddie Mac.

The risk based capital requirements, because they also deal with "off-balance-sheet items", including passed through mortgages, are more relevant to Freddie Mac. Applying those standards results in the following initial capital requirements, using the capital amounts in the marked-to-market financial statements as of September 30, 1989:

	Balance Sheet Assets	Off-Balance-Sheet Assets	Total	Risk Weighting	Nominal Capital Requirement(1)
1-4 Family mortgages	$18.2	$251.2	$269.4	50%	$8.6
Multifamily mortgages	2.4	6.7	9.1	100%	.6
Total mortgages	20.6	257.9	278.5		
Cash and investments	6.3		6.3	0	0
Reverse repurchase agreements	6.6		6.6	20%	.1
Other assets	2.3		2.3	100%	.2
	$35.8	$257.9	$293.7		$9.5
Total capital					$5.0 (2)

(1) Total risk category assets x risk weighting x 6.4%. The 6.4% is the full 8% required times 80%, the requirement for 1990.

(2) Before adjustment for income tax effect not included in the Setpember 30, 1989 marked-to-market financial statements.

This calculation results in a "nominal" calculation that Freddie Mac has less capital than required for a "conventional" thrift ($9.5 billion required versus $5.0 billion capital). However, as noted, Freddie Mac differs from a traditional thrift in three very important respects, namely 1) the passing of all interest rate risk on substantially all purchased mortgages, 2) the fact that Freddie Mac has a low level of credit risk on much of its portfolio through low loan to value ratios, seller warrantees and other credit enhancements, and 3) unlike thrifts, which are limited in their geographical risk dispersion, Freddie Mac's portfolio is spread throughout the United States resulting in a substantial risk minimization to Freddie Mac.

The regulations regarding risk based capital do not yet deal directly with interest rate risk but proposals have been made to revise the standards by considering 2% of the 8% base requirement to be related to interest rate risk. We believe that, in view of the importance of interest rate risk and the studies which support the view that interest rate risk is a major risk factor and in view of the proposed changes, an appropriate adjustment to Freddie Mac's "nominal" required capital would be to reduce the capital required on assets without interest rate risk (passed through mortgages) by 25%, as follows:

	($ in billions)
Total "nominal" capital required	$9.5
Reduction for interest rate risk eliminated on passed through mortgages	2.4
Interest rate risk adjusted "nominal" capital required	$7.1

The effect of seller warranties and other credit enhancements is not directly considered in the regulations (except as it impacts over 80% LTV loans) and no significant external studies exist which permit a definitive estimation of the reduction in risk these factors bring. As a result we have not made any adjustment for this factor.

Like the interest rate risk factor, there are currently proposals under consideration to reduce the risk weighting for single-family mortgages with loan to value ratios of less than 80%. A significant portion of Freddie Mac's portfolio has loan to value ratios well below 80%. We believe that, in view of the significantly different (lower) risk profile exhibited by loans with LTV ratios significantly below 80%, an adjustment to the calculated capital required by Freddie Mac is warranted for this factor.

A fourth factor, risk dispersion, is also inherently difficult to quantify as to its impact on credit risk but various studies and general commentary, as well as all studies of failed financial institutions, indicate that geographical risk dispersion is a very powerful credit risk minimizer, although the range of estimates of this effect (where made) varies rather considerably. Freddie Mac's own experience with credit losses in times of economic downturns and regional stress bear this out.

Based upon our experience and other observations, we believe it is reasonable that the impacts of the lower risk associated with significantly below 80% LTV loans and of geographic dispersion is more than the apparent short fall in Freddie Mac's interest rate risk adjusted capital noted above although the impact is difficult to quantify.

While, standing on its own, the ability of Freddie Mac to meet the thrift industry capital standards, as modified by us to reflect Freddie Mac's interest rate and portfolio risk and geographical dispersion, is not conclusive, it is further evidence of Freddie Mac's capital adequacy.

Mortgage Insurers

Another industry which is at least partly analogous to Freddie Mac is mortgage insurance. When a lending institution makes a mortgage loan with a loan to value ratio greater than 80% it normally requires the borrower to obtain mortgage insurance. When a loan defaults mortgage insurance provides a specified difference between what can be recovered upon disposition of the property and the remaining unamortized value of the loan. For instance, assume an institution lent $90,000 on a property valued at $100,000. In most cases, to qualify for sale to Freddie Mac, the lender would be required to obtain mortgage insurance coverage sufficient to bring Freddie Mac's exposure to $75,000 (75%) relative to the original mortgage. The effect of this is to put the mortgage insurer ahead of the lender in loss coverage up to specified limits.

There are several important differences between Freddie Mac and mortgage insurers. Mortgage insurers are last in line to have cash from disposed property to defray their costs. As a result, the mortgage insurer is the last "creditor" to be considered for retribution whereas Freddie Mac has a significantly superior position. A difference also exists in type of properties covered. The bulk of a property mortgage insurer's portfolio is loans with loan to value ratios greater than 80% and the insurance risk is for that top end of the mortgage (the high risk portion). The exact opposite is true for Freddie Mac. This position likely requires additional capital for a mortgage insurance company *vis à vis* Freddie Mac as the likelihood of loss is greater.

Each state sets the capital requirements for mortgage insurers. One standard ratio used in the industry is a 25 to 1 insured risk (the portion of the loan insured) to capital ratio. Because of the difficulty in equating Freddie Mac's guarantee to the equivalent concept of risk coverage for a mortgage insurer and the absence of relevant studies in this area, we believe that a direct application of the capital standards for mortgage insurers to Freddie Mac is not practical. However, a rough application of the "minimum policyholders position" (which is equivalent to capital requirements) from one major state indicated that Freddie Mac more than meets the capital requirements and we believe it would meet most other state requirements.

In the previous section we discussed and assessed Freddie Mac's capital position in terms of some standard measures of capital adequacy. Standard measures, by their nature attempt to evaluate all the given risks of an industry and then translate those risks into a quantification of required capital. We have seen, though, that Freddie Mac does not fit into a standard industry group and their risks are quite different than other entities. It is logical then that Freddie Mac's capital requirements are going to be different. The following section summarizes key financial institution operating risks and how Freddie Mac manages these risks.

Interest Rate Risk

Historically, the earnings of financial institutions have depended primarily on the spread between their income from lending and investment activities and their cost of funds. Institutions are exposed to interest rate risk when their asset and liability maturities (or repricing frequencies) differ.

The continual comparison and evaluation by management of underlying payment streams, maturities, rates and risks inherent in an institution's asset and liability structure, given current and anticipated changes in market interest rates, is an essential part of the asset/liability management process. The asset/liability gap for any period of time, whether one day, one month or one year or longer, is defined as the difference between the amounts of assets and liabilities that will be repriced during a given period, i.e., assets or liabilities whose value changes in response to interest rate changes. A negative gap exists if an institution has more liabilities than assets repricing during a given period; in a rising rate environment earnings will decrease. A positive gap exists when interest-sensitive assets exceed interest-sensitive liabilities; in a rising rate environment earnings will increase.

Historically, a negative gap position has been predominant in the savings and loan industry. This position, combined with an unprecedented rise in rates, was a major cause of thrift failure in the late 1970's and early 1980's. Examining Freddie Mac's balance sheet we can see that it is also liability sensitive, but this is only for the roughly 5% of mortgage assets it retains in its portfolio, excluding multiclass collateral. For all off-balance sheet PCs, 95% of the mortgages purchased by Freddie Mac, the total interest rate risk has been passed through to the investors.

In quantitative terms Freddie Mac, at September, 30, 1989, had retained interest rate risk on only $14.7 billion of the retained portfolio, or 5% of mortgages outstanding. This 5% includes all instruments which are not a straight pass-through.

Freddie Mac performs ongoing analyses of its interest rate position. Indeed, the 95% pass-through is a "strategy" which derives from such analyses. In evaluating the interest rate risk on the retained portfolio, Freddie Mac's liability sensitive position derives from the historical view that its income was exposed when rates fell since its current book of business tended to refinance, thus reducing guarantee income. Thus it was considered prudent to have an interest rate position that would provide offsetting higher returns in periods of falling rates.

Management has recently revised this position, however, as analyses have shown that in periods of declining rates the reduction of the current lack of business is more than compensated by increases in replacement business (i.e., since Freddie Mac is a major market participant a large portion of the newly originated refinanced mortgages eventually return to Freddie Mac) and growth (i.e., lower wage earners can now qualify for mortgages). Indeed, Freddie Mac's projections for replacement and future growth (due to the trend toward securitization and simple_expansion of the mortgage market [11.92% compounded in the 80's]) are now major factors in income management and forecasting. These projections show that Freddie Mac's value on a marked-to-market basis is actually 1) much higher than the issued marked-to-market financial statements (since there are no replacement or growth assumptions included therein); and 2) is not exposed to a significant change in value when rates rise. Nevertheless, it should be noted that ***all*** Freddie Mac's projections, i.e., those including current book of business and those which factor in replacement and growth, indicate that its marked-to-market capital remains strongly intact for mortgage interest rates varying between 5% and 15%.

Liquidity Risk

Since the majority of most financial institution's assets are generally invested in long-term loans or investments, it is normally crucial that the institution have access to the cash markets or borrowings to meet short-term financial demands. If an institution is forced to sell long-term investments or loans to obtain liquidity, losses will be incurred to the extent that effective rates on those assets are below current market rates. This was the situation in the failure of troubled thrifts, many of which had relied on brokered or jumbo deposits which increased overall liquidity risk because large amounts of money could be withdrawn in a short period of time.

In Freddie Mac's case the risk of a liquidity crunch is minimal. Largely this is because, as with interest rate risk, liquidity risk generally transfers to the security holders when PCs and CMOs are issued, i.e., when mortgage lives shorten or lengthen due to changes in the markets these changes pass directly on to the PC/CMO holder. Freddie Mac's liquidity is required only at the point where defaulted mortgages are "paid out" to the investors.

With respect to its non-pass-through holdings, Freddie Mac is highly insulated by the fact that on average it retains roughly 30 days of float on its pass-through operations, thus providing approximately $4.0 billion in liquidity (or about 100% of marked-to-market capital) at any point in time.

Credit Risk

Credit risk is clearly the predominant risk undertaken by Freddie Mac. Indeed, the company's principal function remains that of substituting Freddie Mac's credit status for that of home buyers, thus making mortgages more liquid and more attractive as investment instruments. Freddie Mac charges a fee for its guarantee of the principal value of mortgages underlying the Freddie Mac securities sold to investors. Freddie Mac's success, therefore, essentially is dependent upon its ability to charge an appropriate and competitive fee, while simultaneously controlling the credit risk it undertakes to ensure that the fees remain sufficient to cover losses, provide a return to shareholders, and allow for adequate income retention in relation to future growth and contingencies.

Managing credit risk is clearly one of the key corporate imperatives at Freddie Mac. It begins with a strategic focus upon the generation of the vast bulk of its activity with strong competent lenders, and qualified loan servicers. It is only with these companies that Freddie Mac will deviate from the standard requirements of its seller/servicer guide, in order to accommodate a particular market need, or to experiment with new products or programs. Freddie Mac's mortgage quality standards remain conservative with these select customers and any technical requirements waived or adjusted to accommodate special mortgages are compensated for in ways which preserve the overall credit quality of the transaction (e.g., with originator provided enhancements, recourse, or both financial strength and price).

Freddie Mac has been a leader in developing underwriting standards and has extensive requirements for loans purchased. In addition, Freddie Mac has stringent loan to value and credit enhancement requirements. Underwriting standards are subject to constant review and revision by the Risk Management Division of Freddie Mac to ensure their continued effectiveness. All of the mortgages purchased by Freddie Mac are warranted to be in conformance with the standard requirements of the seller/servicer guide (including loan-to-value [LTV] ratios of 80% or less for single-family mortgages, to less than 60% for multifamily buildings -- or with any excess covered by mortgage insurance or other enhancements). The sellers' warranty that all mortgages sold to Freddie Mac are in compliance with the guide means, effectively, that any mortgages later found to be out of compliance results in Freddie Mac's right to demand repurchase by the originator.

At the time of each purchase, Freddie Mac receives this warranty along with electronically transmitted listings of details applicable to each underlying mortgage note. Freddie Mac's systems review the data provided for each note, scanning for obvious inconsistencies, and the inclusion of nonconforming loans in the pool. While Freddie Mac's reliance to this point remains substantially upon the seller's warranty that all loans are made in accordance with the guide (or other agreement), its systems then proceed based on the data obtained, to select loans for closer review. This selection process is based partially upon the strength and performance of the originator, partially upon specific loan characteristics known statistically to exist with problem loans, and partially upon a purely random loan selection. Additionally, a portion of loans delivered by new seller/servicers are selected for close review.

On-site reviews are conducted at selected originators' offices. To supplement this ongoing credit review function, Freddie Mac's internal audit department will be conducting regular audits of customers during 1990. This new measure is expected to provide additional benefit to the institutional risk management process. In addition to compliance reviews of the mortgage originators, Freddie Mac reviews mortgage insurers. These audits are essential in ensuring the quality of the mortgage insurance as a credit enhancement. Freddie Mac also monitors the ongoing performance of its customers based on various criteria including financial condition, information processing, and quality of mortgages delivered.

Freddie Mac has five regional offices with headquarters in Reston, Virginia. Major policy decisions are made from Reston while others are delegated to the regions. The headquarters has seven functional reporting groups (including internal audit) which interact with each other and the regions.

The regions have a fair amount of autonomy regarding the waivers of standard requirements. Freddie Mac's Regional Vice Presidents (RVP) are authorized to facilitate negotiated transactions by waiving underwriting requirements when "sufficient experience and knowledge of the business risks" exists and those risks are priced or enhanced. The Reston office must be consulted for previously unapproved waivers or lack of experience with a customer. A monthly review of select negotiated transactions occurs between the RVPs, the National Sales Director and the Vice President of Risk Management.

Furthermore, the RVPs can provide for substitutions of the eligibility requirements to allow a seller/servicer to continue transacting business with Freddie Mac. Structured transactions often involve new types of products and must receive final approval from the National Sales Director. Seller/servicer compliance monitoring is performed by the regional Customer Administration and Institutional Risk Management Departments.

Another important means of monitoring and controlling credit risk is the separate identification and review of all loans which default within 12 months of purchase. This procedure identifies and remedies serious origination problems. Any of these, or other defaulted, loans which result in foreclosure are re-reviewed to ensure that they were indeed in conformance with requirements and warranties, and that the files and loan terms reflect no evidence of fraud. Findings to the contrary allow Freddie Mac to put the loans (and any loss) back to the originator. Surveillance of loan origination, and servicing quality has also been improved for institutions in a weakening or failing status. A specially staffed fraud detection and investigation unit has been created to assist in these reviews and these combined new exercises have already resulted in recoveries in cases where fraud or misrepresentations have been identified.

The fact that Freddie Mac's authority to guarantee loans is limited by the amount of each loan (e.g., single-family loans not to exceed $187,450), and that its average mortgage in portfolio is less than $55,000, provide additional perspective as to credit risk, diversification and loss potential for the portfolio.

Over the last four years losses from loan defaults have been the highest in Freddie Mac's history. Much of this is attributable to the fallout in the southwest. Despite these losses, Freddie Mac has been recording consistently higher earnings. The reserve for loan losses at December 31, 1989 stood at $466.7 million. Freddie Mac's actual losses for 1989 and 1988 were $207.3 and $165.4 million, respectively.

Other Risks

Interest rate, liquidity and credit are the critical risks surrounding Freddie Mac's soundness. All other risks in some way relate back to these three risks. Discussing other risks, however, assists in focusing on nuances of the critical risks.

The tight control of existing products does not automatically insulate a financial institution from risk of loss. The financial market place is dynamic and requires new products to satisfy the needs of its customers. New products create risks of their own. By their very nature new products have no history in relation to changes in the economy and the marketplace. Poorly developed new products may not sell or may heighten interest or credit risk. Freddie Mac realizes this and has implemented a corporate strategy which reduces new product risk. Freddie Mac is very careful in the development of new products. Any instrument which is significantly outside the standard origination process is handled by a special department. A new product goes through at least three levels of review often including a review by one of the executive officers. Freddie Mac has not and does not intend to develop new products unless there is sufficient demand from the marketplace or individual customers. The corporation can afford to do this since its core business, the credit enhancement of 1 to 4 family conventional mortgages, does not require them to rapidly develop new products.

Normally when an entity is as profitable as Freddie Mac, other organizations enter the business and compete for the industry's market share. Such competition drives down profits throughout the industry and requires entities to take greater risks to maintain profits. Presently, Freddie Mac is protected from heavy competitive pressure because only one other entity, Fannie Mae, can provide a credit enhancement on conventional mortgage loans (implicit government guarantee) similar to Freddie Mac. Given this arrangement it is unlikely that Freddie Mac will loose market share in the proportions that would significantly impair capital.

Operational capacity can often heighten an institutions risk for failure. Operations risk can be at either the management level or the systems level. At the management level, operations risk is the possibility of generating losses because management lacks the necessary experience, knowledge, judgment and/or integrity to direct and control the firm's business functions. This is often typified by institutions which enter markets where they have no experience and no competitive advantage. Freddie Mac has developed a strategy which is based on playing up its competitive advantage and avoiding risky new areas. Freddie Mac is constantly reviewing its business and revising its policies so that it remains focused on its core business.

Operational risk can also exist in a systems capacity to manage current and new business. These problems often occur in the back office. They are exemplified by inadequate reports, failure to meet investor deliveries, or late reporting. This operational risk is met through the audit process. Freddie Mac has an internal audit function which evaluates controls in all areas of the Corporation. Also, Freddie Mac is subject to annual audits performed by its external auditors and periodic reviews performed by the GAO and HUD. Due diligence reviews and external analysis of the Corporation by security analysts also provides a measure of control over this risk.

Finally, Freddie Mac's employee performance criteria have been redirected over the past two years from one of emphasis on volume, to an emphasis on the quality of business generated.

Conclusions

As we noted earlier in this report, capital adequacy is a subjective evaluation related to an individual organization and is impacted by and is dependant on the business the organization is engaged in, the risks it takes and the manner in which it conducts and controls its operations and risks. There is neither one exact amount of capital which is always "adequate" nor is it certain that what is considered adequate at one point in time will always be adequate.

However, utilizing economic stress test and other capital evaluation techniques and based upon our assessments of Freddie Mac's business, its portfolio of guaranteed loans, the economic and financial risks faced by Freddie Mac and the manner in which it conducts and controls its business, it is our opinion that Freddie Mac's capital is adequate and provides a reasonable level of taxpayer protection at a reasonable cost.

This opinion does not mean that Freddie Mac will not, or cannot, incur periods of financial adversity or that it will not incur losses or unusual costs but rather that its capital levels are adequate to provide reasonable assurance that Freddie Mac will be able to weather those losses and financial difficulties with minimal risk of cost to the taxpayer.

Recommendations

While our review leads us to the above conclusion on capital adequacy, we did identify several matters which we want to bring to your attention as areas warranting your constant monitoring and attention or correction. Those issues are further detailed in the following section of this report; we have considered those issues in forming our opinion and they do not alter that opinion.

Key Variables

There are a few key variables/parameters which are major factors in ensuring the continued capital adequacy of Freddie Mac and which require constant monitoring by management and oversight bodies. Chief among those are 1) the level of credit risk accepted by Freddie Mac and the policies, controls and procedures employed to ensure that credit risk is kept to an acceptable level, 2) the policy of elimination of interest rate risk through pass-through of substantially all mortgage securities, and 3) the minimization of default costs.

These three areas should be a prime area of focus of the new Board of Directors as well as the Executive branch and Congressional oversight bodies. In this regard, management needs to continue its focus on and periodically provide reports to the aforementioned groups regarding:

- ❑ Key portfolio attributes such as:
    - Loan to value ratios,
    - Percentage of portfolio retained versus sold,
    - Default percentages and default costs,
    - Regional dispersion of portfolio,
    - Regional default and home price appreciation levels, and
    - Pricing levels and trends.

❑ In addition to monitoring those key variables of an economic or financial nature, the procedures and controls used to ensure credit risk minimization, a particular strength of Freddie Mac, need to be both constantly monitored and evaluated, with a particular focus on:

- Underwriting policies and controls,
- Ensuring appropriate credit enhancements are obtained, and
- Approval and monitoring of new products and negotiated transactions.

Board Oversight

In order to ensure proper attention to those issues, we believe that the new Board of Directors ought to consider the establishment of committees with specific responsibility for monitoring credit risk policy, underwriting, and operational controls.

Financial Modeling

A key tool which Freddie Mac uses to assess its capital adequacy and the impact of emerging economic events is its financial modeling system. While, as noted, we believe the model has been appropriately developed and is working correctly, we noted that it is not well documented and is dependent on the knowledge of a few key people. We believe the model documentation should be significantly upgraded. Also, some of the default data and underlying formulas utilized in the model are based on rather old data which, while able to adequately simulate current default results, should be updated. In this process we believe more in-depth studies of past regional default data should be undertaken, with a particular focus on areas of significant regional economic decline such as Denver and Houston in the 1983-1988 timeframes. These matters are discussed in more detail in Section V of this report.

Policy and Procedures Implementation

Over the past year or two Freddie Mac has made a major effort to assess several key aspects of its risk management and its policies and operations and has instituted new procedures and policies in a number of areas, e.g., the reduction in acceptable loan to value ratios for multifamily loans resulting from the increased default levels and an increase in perceived risks. In this regard, we would offer two thoughts; the impact of those matters on the already existing portfolio needs to be assessed and the implementation of those new policies and procedures needs to be monitored to ensure they are fully understood and implemented.

Mr. WOLF. We did not do a similar review at Fannie Mae, so I will not address myself to their questions.

The report that we have issued on Freddie Mac—the Committee has a copy of it and I would appreciate it if that gets into the record—does include a number of things that relate to oversight; things that we would suggest that Mr. DelliBovi and others pay attention to. They have a lot to do with attributes of the business and the portfolio.

They also have to do with something that Mr. Stanton raised—controls, procedures, policies—to ensure that the costs are minimized, that capital is maintained at an adequate level.

Frankly, from our look and also from the audit that Arthur Anderson did of the internal controls at Freddie Mac, I would have to conclude that that is a particular strength of that organization.

Our review included a modeling exercise and application of both the mortgage insurance and the thrift industry capital standards. Although those standards are not directly applicable to Freddie Mac and we need to make modifications to them, Freddie Mac comes out looking reasonably close to what those capital standards would require.

And, last, I guess I would suggest that one of the things that has been mentioned is attributes of the portfolio and a lot of discussion about loan to value ratios. That is clearly one of the key things that makes Freddie Mac different than a thrift. Mr. Stanton mentioned diversification; in fact, that was one of the problems for thrifts. They diversified into all sorts of things that had nothing to do with low risk home loan mortgages. That is not what Freddie Mac does; they focus on low risk mortgages.

And, therefore, we think that the overall capital is at a reasonable level. We also think you could take our report and analogize out of it some capital standards.

And, as I say, we have some recommendations that Mr. DelliBovi might take a look at.

Mr. CAMPBELL. Yes, sir.

JOHN McCONNELL, PROFESSOR OF FINANCE, KRANNERT SCHOOL OF MANAGEMENT, PURDUE UNIVERSITY, WEST LAFAYETTE, IN

Mr. McCONNELL. I am John McConnell. I am commenting at this time because I, like Mr. Wolf, had the chance to look at Freddie Mac's self-study of their capital adequacy, though my involvement started about 3 years ago. And I am one of the academics to which Mr. Stanton referred.

I continue to be a consultant for Freddie Mac but over a fairly long period of time, before this became an issue. And I had a very limited assignment, which was to examine a self-study of capital adequacy done by Freddie Mac, and to comment on whether I thought the procedures employed, the models used, the methodologies and so forth, were sound, whether the assumptions made were reasonable, et cetera.

And the conclusion I came to 3 years ago, was that the model was a good one. They had reasonable assumptions and did reasonable things.

Now, the implication of that self-study 3 years ago, which has now been updated, was that they had adequate capital to make it through the first 8 years of a 10-year depression-like scenario.

And my understanding and after less review, but some review, is that they are currently in the position to make it through the first 9½ years of a depression-like scenario.[1]

But, to sort of follow up comments that implied by others and stated more directly by Pat, that does not mean that the risk of these agencies—Pat Hendershott—that does not mean that the risk to the agencies is zero.

There is some risk. But, it is a risk that the Government seems to have decided that it is willing to take. And it seems like the question to be addressed is how large is the risk that the Government seems to have been willing to take?

And can a regulatory agency, whether it is HUD or some other regulatory agency, monitor the corporations to make sure that they don't change the nature of the business to increase the level of that risk?

So that was my limited assignment. And to some extent, it preceded Mr. Wolf's. And we roughly came to the same conclusions, I think.

Mr. SITES. I am John Sites. I believe that Fannie Mae and Freddie Mac are well-capitalized. However, I would like to spend some time and invite our esteemed guests to spend some time on that aspect of risk which is involved in management.

It is my impression from being in the business for a number of years that these two entities are managed very well. I am a trader by background and my departing, or my basic philosophy, is:

OK, we are in a position. What is important is what we do on a going forward basis.

And while these two entities are most closely identified with Leland Brendsel and David Maxwell, I think it might be helpful for the two of you to expand on the management philosophy and cultures which transcend you and permeate your organization.

Mr. CAMPBELL. I would like us not to get too far into that. I would like to focus in on the concern of the subcommittee at this point. Perhaps we could ask Mr. Maxwell and Mr. Brendsel to submit answers to that question in writing.

Mr. SITES. In my opinion, that should be the key concern of the Government.

[The following information was subsequently submitted for the record by John Sites:]

Question: Please expand on the management philosophy and cultures which transcend current management and permeate your organization.

Answer. There are three basic elements of the Fannie Mae culture that have been institutionalized to the point where I am quite certain they will outlive current senior management: (i) a strong commitment to housing low-, moderate-, and middle-income Americans; (ii) a commitment to sustainable earnings, which implies a commitment to maintaining interest rate and credit risk at levels that combine efficient operation and benefit to the housing market with confidence that the company will continue to earn a profit even in extreme economic environments; and (iii) a commitment to quality, in products, service, and how we interact with those around us.

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[1] Based on data as of the end of 1989.

Fannie Mae employees consistently state that an important reason they like working at Fannie Mae is that the company has a purpose they can be proud of: housing America. Our commitment to sustainable earnings is one that has led us over the last decade to forego short term profits in order to, for example, mitigate interest rate risk by issuing callable debt. The increase in the price of our stock and particularly in the price/earnings multiple, over the past 2 years, is a strong indication that others believe we have made this long-term commitment. Finally, our commitment to quality is evident in many ways, from responses of our customers to quality-of-service surveys to the care we take in establishing viable community-based partnerships for our low income housing tax credit equity investments. While I don't deny a strong influence in establishing these commitments as a part of the Fannie Mae culture, I can assure you they are now deeply engrained in both Fannie Mae and its individual employees.

Mr. CAMPBELL. I think the question I would like to have us focus on implies that. Various comments have been made that the Government has been assuming risks and assessing the nature of those risks. Some in Government are concerned that, at least in recent years, the Government haven't organized to do that job well.

So, of the question being raised in this hearing is:

How can we make sure that we do the oversight more appropriately? If capital standards, other performance standards, are appropriate, how do they get set? What should be the role of Congress? What should be the role of HUD? What should be the questions, the issues that we focus on? What should be the activities that we monitor most closely?

Obviously, one of the concerns would be the ones that you just raised.

I notice that you are furrowing your brow, John (Weicher).

Mr. DELLIBOVI. Let me respond first by saying that we haven't determined any particular standards. We are setting this issue. We are working and maintaining contact with the groups at Treasury and GAO. I have the Price-Waterhouse draft that Mr. Wolf referred to that is going into the mix. We certainly will be awaiting completion of the GAO and Treasury studies.

Our staffs are in daily contact. And we think that we will be able to determine an appropriate standard, although we have not been able to do so, and we have not attempted to do so at this time. We are awaiting the studies.

And, John, you may want to amplify on that.

Mr. WEICHER. Very briefly, you have three organizations with responsibilities to provide studies to you on key elements that will affect your judgment of what the capital adequacy should be, what the capital standard should be for these organizations.

You have ourselves, you have the Treasury, you have GAO. These will be well-studied organizations over the next few months, and we will do our part.

Mr. WOLF. Can I make a suggestion?

You have focused on standards. These Freddie Mac and Fannie Mae are unique businesses. They are neither thrifts or banks, as everybody has said. There are some unique things about them. And I think that you would be better served, frankly, if oversight is oriented to looking for what are the key things that drive this business, that make it go up or down, and that increase or decrease risks.

Monitoring those key attributors and factors and monitoring the policies, procedures and controls that they have in place is a better way to oversee than setting some arbitrary capital number which people will then think is always okay.

Mr. DELLIBOVI. Mr. Wolf, if I may?

Mr. CAMPBELL. Surely.

Mr. DELLIBOVI. We tend to reach out at the risk of violating the Advisory Act or the Paperwork Reduction Act. Let me just say that, as part of our development process, we will be talking to people in the marketplace, people like some of those here today, to get exactly that kind of information. So that that can also be placed into the mix.

We are certainly aware that it is not just one indicator. And I think you probably noticed it in our testimony today. We didn't single out any one particular indicator as that which will tell us whether or not the patient is healthy or not.

There are a number of factors we want to look at.

Mr. WOLF. I was not reflecting on what you put out. I saw the list and I think there is fair congruence between it and what we suggested. I was reacting more to the question of "is there a single standard."

I would be a little careful, from a congressional or any other oversight standpoint, of saying this is the capital number and it must be this at all times, for a somewhat unique organization.

Mr. CAMPBELL. I see some hands and some people have not spoken yet. We should give preference to those who haven't spoken yet.

THOMAS GILLIS, MANAGING DIRECTOR, STANDARD AND POOR'S, NEW YORK, NY

Mr. GILLIS. I am Tom Gillis with Standard and Poor.

We previously have stated what we think of the current capital standards for the agencies, which is at least investment grade. However, in offering some suggestion to the committee, when you look at capital adequacy, I think you have to look at the risk that the Government is willing to take and then, judging that risk, look at the benefits.

The organization is also performing a public purpose. There is benefit. Any benefit has a cost or risk associated with it. So you have to determine the benefits and how much that is worth to the Government.

The capital adequacy can be set from that point.

The risks are not hard to identify. A lot of them have been mentioned. There are interest rate risks. There is market value declines, unemployment. Causes of mortgage defaults, mortgage losses are clear.

How you determine those assumptions is critical in determining the amount of capital adequacy and the costs potential to the Government.

Mr. FLANNERY. Mr. Gillis brings up an important point. Unless the Government does absorb some risk, it is not providing the subsidy that it appears to be intending.

Then the question is how do we make sure that the subsidy, the risk absorbed by the Government, is not too large? Not larger than intended?

And I think there we have to distinguish between the risk of the businesses as currently constructed, the kind of book they currently run, and the kinds of things that the charter might permit them to do if they wished.

And the amount of capital one wishes to hold depends an awful lot on how good one thinks the oversight is. If the oversight is very good, then much, much less capital is required.

And I think that is the importance of the comment that several people have made, that we have two, very large, high profile firms here which are reasonably simple in their operations. They can be subjected to fairly high-quality oversight.

And that is a very important distinction, I think, between these two firms and the 17,000 more distant, less carefully supervised institutions elsewhere.

Mr. CAMPBELL. Pat?

Mr. HENDERSHOTT. I want to reemphasize the point that Mr. Flannery made. The intertwining of capital adequacy and oversight. If you have really strong oversight, you don't need as much capital, and vice versa.

What has bothered a lot of people is that there has admittedly been virtually no oversight to this point. There is a public-window oversight of some sort, but that doesn't seem to be nearly good enough.

I'm sure that we all will feel a lot better when Jack Kemp's crew is in there doing the job, although we do need to worry about maybe the next Secretary of HUD, who might not be a Jack Kemp. That is why there is sort of a need for this independent auditor of sorts.

Mr. CAMPBELL. It always is in their interest.

Mr. STANTON. I guess the bank regulators have developed a very sophisticated interchange between capital and risk oversight. For example, the Fed has just promulgated proposed minimum capital regulations where if your "CAMEL" rating, your Federal examination rating is of the highest quality, then you will hold much less capital than if examination turns up something that isn't nearly as good.

And what I'm about to say is no reflection on the new people at HUD and John Weicher, whom I consider a first rate economist. But, in fact, HUD does not have the people to do the job.

I was at the Homebuilders Convention a couple of weeks ago. Austin Fitts was speaking and saying that, for the direct insurance program, HUD doesn't have the, quote, "infrastructure," which was an elegant way of saying the financial personnel to undertake delivery of HUD programs themselves.

That means, I would suggest, that HUD really doesn't have the infrastructure to oversee the two largest financial institutions in the United States.

Now, a personal note, if I may.

I have policy differences with Mr. Maxwell, with Mr. Brendsel. I wish to state for the record, that I have high regard for both of these gentlemen. But, Mr. Sites is a trader and the Government's position if not a trading position. We cannot get out of our position if management makes a mistake. And the Government has got to monitor in the interest of long-term viability of these institutions.

Mr. DELLIBOVI. Let me respond, Mr. Chairman.

I assume whatever Austin Fitts said about the multifamily insurance program and the resources that the FHA has to deal with that related to the Multi-Family Insurance Program, I can tell you that—and we appreciate your compliment to Mr. Weicher—we have other talented people like Mr. Weicher. One of the virtues of having people like Secretary Kemp and John Weicher on our team is that we can attract other good people.

And as I said in my statement and in the earlier question, we not only have the capability and the capacity, but if we need to attract new people, we are sure we will be able to do that.

And we probably will not be looking down at the Multi-Family Program to find them, but we will recruit in a wider place.

Senator CRANSTON. If I may interject just a moment, I have been summoned to something else I have to go do now, I think that we pretty well covered the agenda that we intended to cover.

But, Don has a couple of questions from another Senator and perhaps one or two other matters to cover, and some of you may wish to add something.

I assure you I will look at the record, as will the other Senators. I think it has been a very productive session and I hope you like the format which we have used, which I think is much more informative than the more sterile way that many hearings are conducted.

I thank each of you very, very much for your cooperation and help from us in the constructive statements and attitudes that you brought to this session. I think nobody should be concerned about the present, very strong solvency and stability of Freddie Mac and Fannie Mae.

I appreciate the leadership we have had from them and from HUD, and the advice and help that all of you have given us. I thank you a great deal.

And, Don will carry on a wee bit more. And please stay here until he feels that we have covered everything that we want to cover.

Thank you again.

Mr. CAMPBELL. There are several questions that have been suggested by several other Senators.

Senator Riegle has asked us to pose the following question to Mr. Kriz, in particular:

Today's Washington Post quotes Moody's as saying,

"Institutional investors are increasingly worried about the creditworthiness of GSE's, such as Fannie Mae, and some of those concerns 'may not be groundless'."

Could you explain some of the background on that?

Mr. KRIZ. This is in response to a report that we released yesterday, a draft of which has been submitted to the committee. And I have some printed reports that I would be happy to submit to you.

What it reflects is increasing focus of investors around the world—particularly European and Japanese investors, with whom we speak frequently—on the credit quality of Government-sponsored enterprises in general, not just American Government-sponsored enterprises.

And what they found is that, in recent years, some of these companies have gone bust, and their creditors have lost money.

I can give you two examples from overseas and one from the United States. One is Kongsberg Vaapenfabrikk, a large company in Norway; and a short time ago, it failed. This company was wholly owned by the Norwegian Government. The creditors of Kongsberg Vaapenfabrikk felt that they had a Norwegian Government risk after the company failed; they found that they didn't. The Norwegian Government refused to support the company.

This could be an analogous situation to a Government-sponsored enterprise in the United States.

Also, there was DFC New Zealand, a financial institution in New Zealand, that failed a short time ago, defaulting on about 2.2 New Zealand dollars' worth of debt, much of which was owned by the Japanese.

This company was created by the New Zealand Government and was recently privatized; the shares were issued. This firm failed because of asset quality problems.

The holders of its debt securities again felt that they had a New Zealand Government risk. And they found out in the event that this was not true.

This has also happened in the United States. It is not too long ago that the Federal Land Bank of Jackson, MI, one of the constituent members of the Farm Credit System, failed. It is now in liquidation. It is in receivership by the Farm Credit Administration, its receiver, The Federal Land Bank in Jackson defaulted on its trade creditors and the U.S. Government really has taken no steps to bail out these trade creditors.

Obviously, the consolidated bonds of the Farm Credit System are taken care of through the joint and several liability, and there's no question that they will be paid.

What we have seen here is several shocks to the system around the world of institutions that are owned by or related in some manner to a central government that have failed and cost investors money. So they are refocusing on this.

A lot of the calls that we answer and in a lot of the meetings that we hold with investors, Government-sponsored enterprises in the United States are a topic with foreign investors. We found that American investors are very, very knowledgeable about Government-sponsored enterprises—Fannie Mae, Freddie Mac, the Home Loan Banks, and so forth—and are very comfortable with their credit quality—their inherent credit quality, as well as the Government relationship.

We found that foreign investors are less well-informed and much more nervous about U.S. Government-related credit risks after looking at the problems of, particularly, the FSLIC and the large check that the American taxpayer is cutting.

So a lot of the work that we do at Moody's through our written research and through conversations we have with investors is to try to explain to them not only the fundamental credit standing and good credit standing of most Government-sponsored enterprises, but also the nature of the relationship of Government-sponsored enterprises to the United States.

One or two comments on this that Senator Cranston brought up.

Senator Cranston made, I think, a very good point about the importance of Fannie Mae and Freddie Mac to the financial health of the United States, the housing markets and the financial markets generally. Their securities are widely held by regulated thrifts, banks, credit unions, and insurance companies, and should either of them be insolvent, which we think is not going to happen by any stretch, but just for the sake of argument should they, the ramifications on the health of their securities holders would be enormous.

And, of course, the Government is the insurer of the deposits at many of these institutions. And so, one way or the other, the Government is going to end up picking up the tab for a severe problem at either one of these companies.

And we consider that a very, very important reason for the Government to most likely provide financial support should it be needed. And we don't think that it is ever going to be needed.

Mr. **Maxwell**. Since the story that you cited mentioned Fannie Mae, I think it is important to note for the record that—I assume I am correct in saying that Moody's has no question of the fact that our debts will be paid, since they have rated us Aaa.

Mr. **Kriz**. Yes, sir.

Mr. **Maxwell**. The second thing, I think, is a point that Mr. Rupp brought up earlier. When you talk about investor attitudes, obviously, the best way to find out what those are is to look at what is going on in the market.

We issued yesterday $800 million of 5-year callable debt, callable in 3 years at 42 basis points spread over Treasury's, and $700 million of 10-year callable debt, callable in 5 years, at 75 basis points over Treasury.

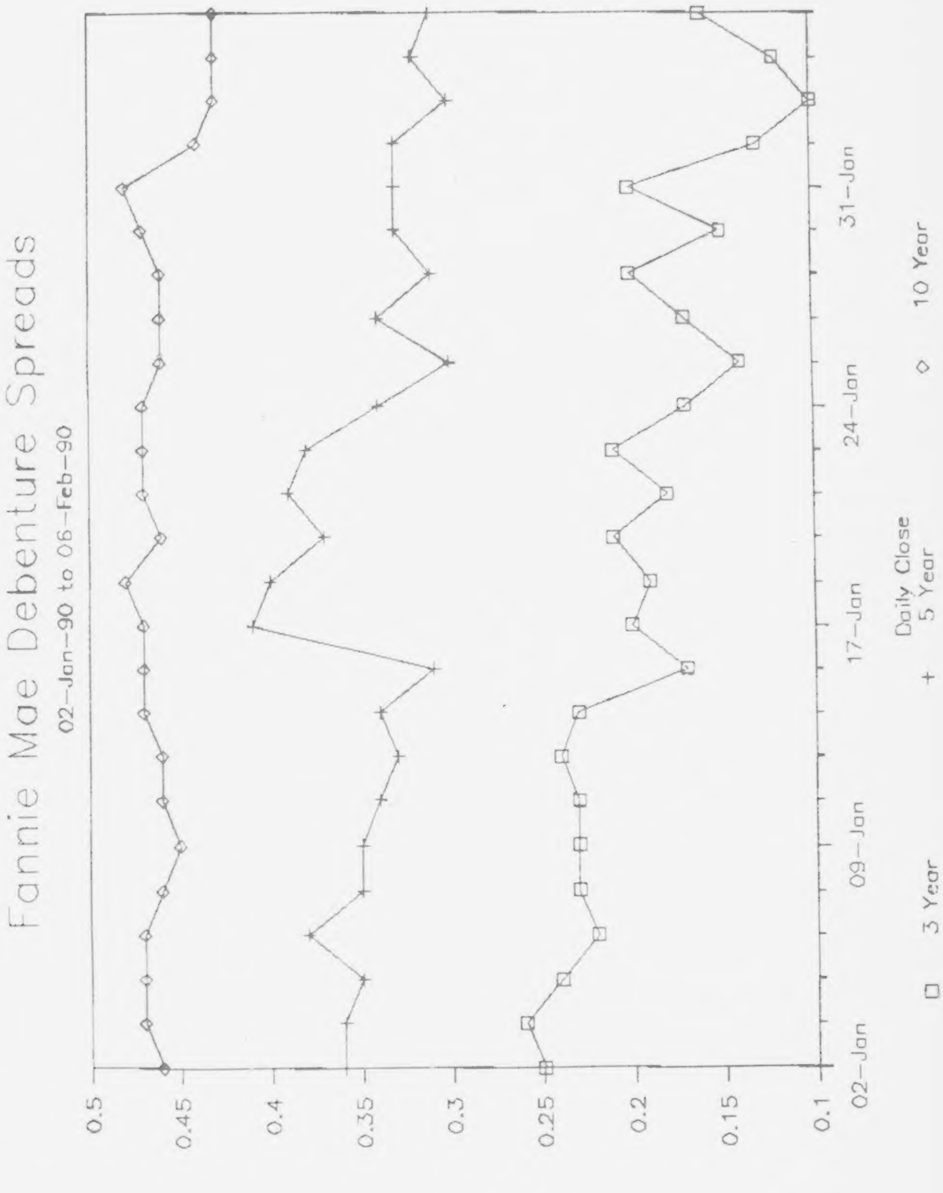
Now, this is part of our program of issuing callable debt, which insulates us even better against interest rate risk. And these spreads were right at where we would expect them to be and where they traditionally are.

Moreover, those issues opened up for trading this morning and are trading right at the spread at which they were issued.

I would like your permission to submit for the record, to show investors' confidence in Fannie Mae, a graph that shows the spread of our debt over Treasury debt at various maturities from the beginning of this year through yesterday, and shows that those spreads have remained pretty much where you would expect them to be.

Mr. **Campbell**. That will be included in the record.

[The information referred to follows:]


Fannie Mae Debenture Spreads
02-Jan-90 to 06-Feb-90
Percent (%)
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
02-Jan
09-Jan
17-Jan
24-Jan
31-Jan
Daily Close
□ 3 Year
+ 5 Year
◇ 10 Year

Mr. CAMPBELL. Senator Pressler has two questions. They are for Mr. Maxwell and Mr. Brendsel. One of them deals with the experience of Fannie Mae's capital cushion during the 1981 period, and the other one deals with any planned lessening in the credit requirements on the home loan mortgages that you would be purchasing.

I think the best way to deal with that is to submit the questions to you and ask for a written response as soon as possible.

Mr. CAMPBELL. The discussion has covered virtually all of the questions that the subcommittee identified.

Is there something else that is yearning to be said?

If so, I would like to give you an opportunity to say it now.

Mr. SCHLOSSTEIN. At the risk of taking us a half a minute longer, the last issue, user fees, was not discussed at all. And since it was in the President's Budget, I think it is worthwhile at least pointing out the fact that the user fees themselves, as everyone surely knows, will be paid by someone. And there really are a couple of sources here.

And the only reason that I mention this is it is very apropos to what we have been discussing for the last 2 hours.

No. 1, they could very well come out of the homeowner's or the mortgager's pocket, and that is fine. I think that is clear. It is a public policy decision, how Congress and the administration want to raise revenues, whether they should come through the general income tax or user fees or tax an individual group of people.

I think the other possibility though is that, in some way, they are not passed through to the homeowner which, in my view, is the most palatable event.

But, if that does not occur, that somewhere else in the mortgage chain, either the originators of these loans which are predominantly Government-insured deposit banks and savings institutions or the Government-sponsored agencies themselves, you will place pressure on the profitability of those entities and make far more difficult the entire process of raising capital and increasing the cushion between the obligations and theoretical liabilities of these entities and the Government itself.

And we have talked a lot about the debt markets and the impact of the psychology in those markets. You happen to have two companies that are—you have very strong access to the equity markets right now, and part of that access comes from the fact that their equity owners perceive that there is not a real threat to the profitability of these institutions.

And I think we have to be careful once again in the category of: If it ain't broke, don't fix it, jeopardizing the variability to increase the capital cushion between the Government and their liabilities through some efforts which seemingly would seem very benign.

Mr. MAXWELL. May I add one point?

I'm awfully pleased that was brought up. I would like to go back to an earlier point on this, too. Clearly, it would be necessary to try to pass on as much of this fee as we could to the home buyer in order to maintain our capital position. That, in turn, will have the effects that were discussed earlier of upward pressure on mortgage rates, which exerts downward pressure on mortgage prices; which, in my view at least, would make the assets held by the RTC worth less than they might otherwise be worth.

And I think that, if Congress entertains this proposal at all seriously, they really should look at the trade-off between what it is going to cost in additional expense in the S&L situation versus the rather negligible amount that would be produced for the budget by imposing these fees.

Mr. HENDERSHOTT. I am sure that the S&L's would be better off if they could earn a higher mortgage rate.

Mr. MAXWELL. Bad for the RTC, bad for the taxpayers.

Mr. HENDERSHOTT. I don't think so. It would be good for S&L's. It would be good for the taxpayers.

Mr. CAMPBELL. Are there other questions?

Mr. RUPP. It might be good for S&L's to hold them in their portfolios, assuming there was no corresponding movement (a) in their deposit base; or (b) in the prepayment expectations on those loans.

But I see it having a negligible effect on those who consider themselves mortgage banking-type entities since they trade their loans at market levels, on a mark-to-market basis. In other words, these loans would trade "at the market" regardless of where the market is.

Mr. HENDERSHOTT. I was referring to the portfolio investors.

Mr. CAMPBELL. We will keep the record open for one week. If one of our witnesses has a flash of insight that needs to be in the record, we will be happy to include it.

Again, I want to thank you very much for being here. This is not the last time we will be gathering in this room to discuss this issue.

Thank you very much. This concludes the hearing.

[Whereupon, at 12:17 p.m., the hearing was concluded.]

TESTIMONY PREPARED FOR HEARING OF SENATE BANKING COMMITTEE, HOUSING SUBCOMMITTEE

FEBRUARY 7, 1990

Nancy G. Spady
Morgan Stanley & Co.

The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation operate as the major forces in the U.S. secondary mortgage market. As a result of their activities, mortgage loans are packaged and sold without regard to individual credit characteristics, allowing capital to flow into the residential mortgage market from nontraditional sources such as insurance companies, pension funds and foreign investors. This increases competition in the primary mortgage market, reducing the cost of mortgage debt for moderate-priced housing in the U.S. Evidence of this benefit is the average half percentage point premium consumers pay for mortgage loans that do not conform to the Fannie Mae and Freddie Mac standards.

While most investors in the debt and mortgage-backed securities of these two companies appear to believe that the government implicitly backs their securities, I believe the risk of having to fulfill any such guarantee is minimal. Both Freddie Mac and Fannie Mae invest in and guarantee one of the safest classes of financial assets available, residential home mortgages. Their concentration on loans for single-family, owner-occupied properties throughout the U.S. and their sound underwriting policies should assure a continuation of their past record of low loan defaults and subsequent losses.

As an equity research analyst for Morgan Stanley, I evaluate both the opportunities and the risks for investors in the stocks of these two companies. While their agency status shields them from much of the discipline of the debt market, I believe the scrutiny of equity market participants provides a significant incentive to manage risks. This is increased to the extent that management's compensation is linked to their stock's performance.

In order to examine the issue of risks faced by the government in its relationship with Freddie Mac and Fannie Mae, we can start with the question of whether the companies have provided a sufficient cushion of capital. We can then evaluate the risks to which these companies are exposed and their management policies that deal with those risks. I conclude that the operations of these two firms pose little risk to the government and that both currently have more than adequate capital as well as rising earnings that continue to build their capital base rapidly.

WHAT IS "ADEQUATE" CAPITAL?

Capital is the cushion available to debtholders and other creditors of a company and to its guarantors, implicit or explicit, in case of losses. It consists of any initial investment in a firm plus earnings retained in the company. However, the real value of capital may be entirely different from its stated or book value because of historical cost accounting conventions and the presence of off-balance sheet assets and liabilities. A fixed income instrument such as a mortgage, for example, might be worth more or less than its historical purchase price if interest rates have changed since it was acquired. In addition, the right to receive fees in return for servicing and guaranteeing a portfolio of mortgage-backed securities that have been sold to investors has a value, though it is not usually included in the balance sheet. Thus, published financial statements may not provide an accurate picture of the true cushion available to creditors.

There are few established conventions to measure the current, or marked-to-market, value of assets and liabilities and, therefore, of equity. However, Freddie Mac has begun exploring this area, in spite of the practical and theoretical difficulties, and has published a market value balance sheet that shows market value equity of more than twice its historical book value. This measurement process is still evolving, but the approach may add to our understanding in evaluating financial services firms in the future.

Another alternative would be to look at the market valuation assigned to an equity by the stock market. This would incorporate a valuation of both the stream of earnings to be generated by the current assets and liabilities and the growth prospects for the company. In the case of Fannie Mae, for example, the stock market assigns a value of $7.7 billion to its 239 million common shares, or about 2.5 times the book value of its equity. Freddie Mac's voting common shares have a market value of about $3.9 billion, or twice their book value.

Whether Fannie Mae and Freddie Mac have sufficient capital can be approached from a variety of directions. One method would be to compare their balance sheets to a regulatory standard from another part of the financial services business, such as the savings and loan, banking or insurance industries. I believe this method is neither appropriate nor necessary. Among the most important reasons is that Fannie Mae and Freddie Mac have little latitude in their choice of assets compared with companies in these other industries, since they are restricted to acting in the secondary market for residential mortgages. This eliminates the possibility that these two companies will engage in higher-risk businesses with which their managements might be unfamiliar and which may expose them to greater losses. In addition, nationwide diversification provides them with a cushion against regional economic downturns not available to most other financial institutions. It also appears to me unnecessary to impose a blanket standard since Fannie Mae and Freddie Mac are not part of an industry with a large number of companies that may be more easily regulated in a uniform fashion by imposing blanket standards.

I believe that a better approach to determining capital sufficiency is to evaluate the risks they face directly. We can first look at Fannie Mae and Freddie Mac's historical experience to approximate the potential risks in a variety of economic climates. This method falls short, however, since the financial system has changed significantly in the last ten years and the variety of mortgage loans Fannie Mae and Freddie Mac guarantee and own has expanded dramatically.

Another risk-based approach is to simulate an extreme economic environment and assess the losses that might occur. This sort of doomsday exercise might include running the entire portfolio through a Great Depression simulation or a scenario that mimics the southwest real estate collapse of the 1980s. Another form of stress test would simulate a radical shift in interest rates and its effect on net interest income from any balance sheet maturity mismatch. Since capital is largely a means to protect creditors from losses, I believe this is the best method for determining how great a cushion these companies need.

This discussion focuses on the current context, the market for loans on existing residential properties. However, my view of the risks in these two companies could be changed significantly by outside forces. For example, if Fannie Mae and Freddie Mac were required to purchase or guarantee new types of assets, such as construction or nonresidential mortgage loans, perhaps as part of the resolution of problems in the thrift industry, I would view this as a significant concern for investors and an increase in risk to the government.

As another example, if the two companies' earnings were impaired by a special tax, this would reduce the cushion that is being built to shield creditors and, ultimately, any guarantors, from risk. It would also impair Fannie Mae and Freddie Mac's ability to obtain funding in the equity market since it would raise the specter of possible capital appropriation in the future. The probability of these and similar events is difficult to assess, but I believe they would fundamentally worsen the outlook for and risks of Fannie Mae and Freddie Mac.

ASSESSING THE RISKS IN THE SECONDARY MORTGAGE MARKET COMPANIES

Fannie Mae and Freddie Mac are exposed to risk in two primary areas. First, they take on credit risk by guaranteeing loans pooled into mortgage-backed securities or by investing in mortgages for their own portfolio. Second, they are exposed to interest rate risk to the extent that the interest rate paid on their liabilities reprices at a different pace than that on their assets. There is added interest rate risk if the mortgage loans have different options to prepay than the liabilities with which they are funded.

When a loan is packaged and sold to investors, the companies do not retain any interest rate risk, but they may retain the credit risk by guaranteeing the security. Loans held on the balance sheet and funded by debt are subject to both interest rate and credit risk. In both areas, management's policies can significantly limit the exposure of earnings and capital to outside forces.

THE SIZE OF THE RISK

Freddie Mac holds about 6% of its total mortgage exposure of $295 billion on its balance sheet in the form of whole loans. The other 94%, or $279 billion as of year-end 1989, has been securitized and is funded by unrelated investors. Fannie Mae carries a much larger portfolio on its balance sheet, amounting to $111 billion, or about 34% of its total outstanding mortgage loan balances. The other 66%, $217 billion at year end 1989, has been sold to investors as MBS.

Freddie Mac and Fannie Mae earn fees for servicing MBS and for guaranteeing timely payments. For about 59% of Fannie Mae's and more than 90% of Freddie Mac's MBS, the company also carries the risk of credit losses if the homeowner defaults. Fannie Mae has some form of recourse back to the loan originator for the other 41% of its MBS. Thus, Fannie Mae carries the primary credit risk for about $233 billion of loans and MBS, while Freddie Mac's exposure is for about $260 billion of its $279 billion total outstanding loans and MBS. Fannie Mae is also subject to interest rate risk on about $111 billion of loans funded by debt and other liabilities, while Freddie Mac has interest rate exposure on about $16 billion of mortgages.

Both companies also make recourse arrangements, in which the originator of a loan that defaults bears the risk of loss and repays Fannie Mae or Freddie Mac. It is unclear how much credit one should give for recourse, since in the difficult economic environment in which they would be relied upon most, it is possible that the counterparties to the agreements might not survive to pay off. However, both companies carefully screen the firms with which they make recourse arrangements and monitor their financial soundness. In addition, their experience to date has been very favorable, with virtually no losses reported on recourse deals, even from thrifts that have failed. In the case of an economic calamity, however, it is likely that some portion of recourse obligations would not be honored and this must be factored into any risk analysis.

HOW SAFE AN ASSET IS THE SINGLE-FAMILY MORTGAGE?

Mortgages on owner-occupied single-family homes are considered to be among the highest quality financial assets available. Default rates have been a fraction of those on other types of loans and losses on those few mortgages that defaulted were minimal. Some lenders were even able to sell properties for more than their loan amount after a default. Fannie Mae and Freddie Mac's experience was not unusual for lenders in this area. Table 1 provides data for credit losses at both companies from 1978 through the third quarter of 1989, including both their single-family and multifamily programs.

While several factors affect default rates on single-family mortgages, by far the most important is the owner's equity in the underlying property. If a homeowner encounters financial problems because of unemployment, sickness or other debts, he is most likely to sell his house rather than default so that he can keep the equity in the property, which is often his single greatest asset.

Until recently, the unblemished reputation of home mortgages was aided by more than a decade of substantial appreciation in housing prices throughout most of the U.S. If housing prices appreciate, this adds to the equity in a property, making default even less likely. This was the case in most regions, especially during the 1970s and much of the 1980s as low inflation-adjusted interest rates were factored into housing prices and the Baby Boom generation entered their homebuying years, sending demand soaring. However, if housing prices decline, equity may be eroded or, in the extreme case, eliminated, so that the borrower may end up owing more than the price his or her house would bring on the market. In this case, the homeowner may default, leaving the holder of his mortgage with the loss from the price decline.

Table 1
Fannie Mae and Freddie Mac: Charge-Offs and Reserves

	Federal National Mortgage Association		Federal Home Loan Mortgage Corporation	
	Chg-Offs	Reserves	Chg-Offs	Reserves
1978	.02	.24	.002	.29
1979	.02	.25	.019	.31
1980	.01	.25	.038	.34
1981	.01	.18	.002	.36
1982	.01	.19	.009	.24
1983	.05	.17	.018	.21
1984	.11	.14	.020	.21
1985	.17	.15	.044	.19
1986	.16	.19	.037	.15
1987	.18	.20	.057	.15
1988	.17	.20	.063	.16
1989				
1Q	.12	.21	.074	.16
2Q	.14	.21	.079	.16
3Q	.11	.20	.056	.16

Charge-offs are a percentage of average balance. Reserves are a percentage of ending balance.

For Fannie Mae, MBS include only loans for which Fannie Mae bears risk of default without recourse to the seller.

This was an important element in recent credit problems with single-family home mortgages as the price of homes declined in some regions because of the state of the underlying economy. Real estate activity and home prices depend largely on the local economy. If business in an area is strong and jobs are being created, people emigrate to the area, existing home prices rise and more homes are built. If a region loses jobs and the population shrinks, home prices are likely to fall. However, I believe it is unlikely that a substantial decline in housing prices nationwide would occur without a near-collapse in the economy. So long as housing prices at least remain stable in most of the U.S., the credit quality of single-family residential mortgage loans is likely to remain very high, ensuring that Fannie Mae and Freddie Mac's loss ratios follow their historical experience.

Management can influence default rates by requiring borrowers to have a significant amount of equity in the form of a cash downpayment. Fannie Mae and Freddie Mac's loss ratios vary, as shown in Table 1, in part because they used different underwriting standards before 1986. Fannie Mae changed its policies in that year to require greater downpayments and tightened other standards. This has already begun to show results in the form of much lower losses on the newer cohorts of loans at a given age in their life cycle. For example, single-family loans bought in 1985 had a rate of serious delinquency and default of almost 2.5% after three years, while loans purchased in 1986, under the new standards, had a rate of less than 0.5% at the same age, according to data provided by Fannie Mae. Since more than 80% of Fannie Mae's loans and MBS have been created under the new standards and the older loans are more seasoned, the company's loss experience should continue to improve and the difference between the two companies should narrow.

Another factor mitigating the risks in these companies' portfolios is that both Freddie Mac and Fannie Mae require borrowers to obtain private mortgage insurance if they have less than a 20% downpayment. This insurance covers any loss from a default for up to 20-25% of the original value of the property. The private mortgage insurance company thus takes the greatest share of risk, since the probability of default on these low equity loans is greatest and the insurer bears the first burden of any loss.

Finally, I would argue that the loan amount limits imposed on Freddie Mac and Fannie Mae also contribute to their favorable credit experience. First, moderate-priced housing is by definition more affordable for a greater number of homebuyers at any given time, making the market for these properties deeper and less subject to wide swings in demand and prices than higher-priced homes. In the price bracket in which Fannie Mae and Freddie Mac lend, houses provide for the necessity of shelter more than they serve as an investment or fulfill any desire for consumption.

Second, the limits have prevented the two companies from lending in many of the markets with the fastest home price appreciation. These same markets often include a speculative element as prices skyrocket and accurate appraisals of property value become more difficult. Hot markets also often experience growing supply and softening prices soon after a sharp run-up, which can cut into the equity cushion that is a lender's primary protection. Thus, exclusion from hot markets has probably helped protect Fannie Mae and Freddie Mac.

INTEREST RATE RISK: THE GHOST OF THE PAST

For Fannie Mae, interest risk management was a top priority of the 1980s. Freddie Mac was largely insulated from this issue since it derives most of its income from the fees on its MBS outstandings and holds a relatively small portfolio of loans funded by debt. In addition, the large float balances for Freddie Mac in the monthly payments on its MBS provide interest free funds that help reduce its outside funding needs.

Fannie Mae's experience of the late 1970s and early 1980s caused management to reevaluate its interest rate risk and attempt to closely match the maturities and repricing characteristics of its assets and liabilities. As interest rates rose sharply, Fannie Mae experienced significant losses despite the low credit loss ratios discussed above. This was mainly the result of holding thirty-year fixed rate mortgage loans funded by debt with an average maturity of under three years. As interest rates rose and the cost of the company's debt skyrocketed, mortgage activity slowed to a crawl and homeowners paid down their loans at a slower-than-normal pace. By 1981, Fannie Mae's new management found a company hemorrhaging from this interest rate mismatch.

By first extending the maturity of the company's debt and adding adjustable rate mortgage loans to the portfolio, management attempted to shrink its interest rate mismatch. More recently, the MBS business has provided a stable base of fee income to cushion earnings from swings in rates. Fannie Mae also has issued callable debt and debentures with a sinking fund that mimics the prepayment rate of mortgages, paying off faster when rates fall and more slowly when rates rise. During the 1980s, the art of interest rate risk management has become more sophisticated and I believe that Fannie Mae is among the best-managed firms in this area. Earnings appear to be largely insensitive to changes in rates such as we have seen in recent years. According to management, earnings would not be materially affected by shifts in the yield curve of as much as two percentage points. Thus, interest rate risk no longer appears to present a substantial risk for Fannie Mae, under any reasonable economic scenario.

DOOMSDAY SCENARIO: HOUSING BUST WON'T BREAK FANNIE OR FREDDIE

Although I believe a severe decline in housing prices is unlikely, I constructed a doomsday scenario. Briefly, I estimated the number of loans that might default and the losses thereon based on the loan-to-value ratios at origination of loans in the companies' portfolios and the amount by which home values decline. Tables 3 through 5 at the end of this statement provide details of the results. The major assumptions include:

- o Housing prices on both coasts and in the Southeast fall 30%; in the Midwest they decline 15%. The Southwest is assumed to have already reached bottom.
- o It is assumed that default rates resemble those on Fannie Mae's loans written at the peak of Texas real estate in 1981-1982, when its underwriting standards were much weaker, as I noted above. Freddie Mac's

underwriting standards produced better loss results than Fannie Mae's even in the Texas debacle, making it unlikely that its experience would approach these levels.

- It is assumed that only half of recourse deals are honored and only half of private mortgage insurance is paid off. The scenario assumes all loans with a loan-to-value ratio above 80% are covered by private mortgage insurance or other credit enhancements such as overcollateralized pools.

The conclusion to be drawn from this scenario is that neither Fannie Mae nor Freddie Mac would need a bailout; both would survive the same economic storm better than many industrial companies (Table 2). Since these losses would likely unfold over several years, the blow to capital would be cushioned by ongoing earnings.

Using these assumptions, I estimate that Fannie Mae would suffer credit losses of about 84 basis points of its portfolio and MBS. If this disaster occurred over four years, it would halve Fannie Mae's earnings for that period, so that its return on equity would still be 15-20%. Freddie Mac in the same case could see loan losses of about 1.13%, eliminating earnings for about four years. This reflects Freddie Mac's greater leverage and slimmer margins from specializing in credit rather than interest rate risk management. Freddie Mac does not have the net interest income from a large loan portfolio to offset the hypothetical credit losses. In addition, Freddie Mac arranges few of its purchases with recourse to the loan originator; such purchases mitigate some of Fannie Mae's losses in this scenario.

The financial reserves available to each company easily exceed these hypothetical losses. Fannie Mae would lose about $1.7 billion in this scenario. Its year-end 1989 common equity stood at $3.0 billion and loss reserves equaled another $463 million; Fannie Mae should earn about $1.1 billion in 1990. Freddie Mac's hypothetical charge-offs using Fannie Mae's worst cohort of loans would equal $2.1 billion. At year-end 1989, equity equaled $1.9 billion and loss reserves, $466 million. Again, these exceed the potential loss, which would likely occur over several years, not all at once. Estimated 1990 net income of $500 million adds to the cushion. Finally, Freddie Mac's underwriting standards have produced better loss results than Fannie Mae's, making it unlikely that its experience would approach these levels. Even in Texas, the company's delinquencies and losses were at half the rate for other lenders on mortgages nationwide, according to management. Thus, we believe both companies could withstand so unlikely an economic earthquake.

Table 2
Doomsday Scenario - Summary

	Fannie Mae	Freddie Mac
Total Loans/MBS	$307 Bn	$279 Bn
X Wtd. Loss Ratio *	0.84%	1.13%
	$2.6 Bn	$3.2 Bn
X (1-Tax Rate)	66%	66%
Potential Charge-off	$1.7 Bn	$2.1 Bn
12/31/89 Equity	$3.0 Bn	$1.9 Bn
12/31/89 Loss Res.	$463 MM	$466 MM
1990E Net Income	$1,149 MM	$508 MM

*FRE loss ratio is higher than FNM's because FRE buys few loans with recourse to originator.
Morgan Stanley Research Estimates

Although housing as an investment is unlikely to repeat its stellar performance of the 1970s, we believe that a doomsday scenario in which housing prices fall nationwide by 30-40% would be more devastating than many proponents of this outlook perceive. For example, it took a regional economic disaster of the magnitude seen in the oil-dependent states of the southwest to produce such a downturn in housing prices in the 1980s. During the Great Depression, housing values generally fell about 50% and bankers stopped foreclosing on properties because of the futility of trying to resell them. If one really believes a residential real estate disaster is going to occur, Freddie Mac and Fannie Mae will not be our only, nor will they be our biggest problems. The economic environment that would cause such a deflation in housing prices would be so severe that few industrial companies would prosper; many would not survive.

MATURING MARKET WILL BOOST CAPITAL RATIOS

Ultimately, the question as to whether the two secondary mortgage market agencies have adequate capital will lose its urgency as their markets mature. The past decade saw rapid acceleration of the securitization of mortgage assets and sales of MBS and mortgage loans to non-traditional investors, such as pension funds and insurance companies. In 1980, Freddie Mac and Fannie Mae guaranteed or held about 10% of conventional (i.e., not government-insured) mortgage loans; by 1989 their share grew to more than 30% and the conventional mortgage market more than doubled in size. In supporting and developing that market, the companies' assets grew far faster than even their healthy returns on equity supported internally.

As we enter the 1990s, growth in mortgage debt is likely to slow, and the increase in the two companies' share should be less dramatic than it was in the 1980s. If they maintain, as we expect, their current high returns on equity, both companies can achieve a higher ratio of equity to assets at risk in the coming years. We estimate that the average growth rate in outstanding loans guaranteed or held by Freddie Mac and Fannie Mae will be less than 15% over the next five years, while their returns should be well in excess of 20%. Thus, from the perspective of the 1990s, their capital position during the 1980s is likely to be the nadir.

Federal Home Loan Mortgage Corporation (FRE-$65)
Federal National Mortgage Association (FNM-$32)

Within the last three years, Morgan Stanley & Co. Incorporated and/or its affiliates managed or comanaged a public offering of the securities of Federal Home Loan Mortgage Corporation and Federal National Mortgage Association.
Morgan Stanley & Co. Incorporated and/or its affiliates or employees may have a position or hold options in the securities discussed herein.
To our readers in the United Kingdom: This publication has been issued by Morgan Stanley & Co. Incorporated and approved by Morgan Stanley International, a member of The Securities Association. The investments discussed or recommended may be unsuitable for certain private investors depending on their specific investment objectives and financial position. We recommend that such investors obtain the advice of their Morgan Stanley International representative about the investments concerned.
Additional information on recommended securities is available on request.

Table 3
Doomsday Scenario
Fannie Mae's Loan-to-Value Distributions at Origination

Loan-to-Value	U.S.	NEast	West	SEast	MWest	SWest
0-70%	31.6 %	42.6%	27.4%	24.9%	29%	19.9%
71-80	42.6	37.1	47	43.2	44.3	37.3
81-90	18.9	14.5	20	20.3	20.4	24
> 90	6.9	5.8	5.8	11.7	6.4	18.8
% > 70% LTV	68.4	57.4	72.8	75.2	71.1	80.1
% with recourse	33.7	41.2	32.9	32.1	31.5	20.3
Recourse Loans As % >70% LTV Loans	49.3	71.8	45.2	42.7	44.3	25.3
Region's % of Lns	NA	28.5	31.6	14	14.7	11.2

Table 4
Doomsday Scenario
Fannie Mae - Hypothetical Losses

Northeast LTV	% of Portfolio	1-1/2 % w/Recourse	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	42.6 x	x	1.4 x	5 =	.03% x	
71-80	37.1	64.1%	6.7	15	.24%	
81-90	14.5	64.1%	14.1	20	.26%	
> 90	5.8	64.1%	24.1	30	.27%	
					.80%	28.5

West LTV	% of Portfolio	1-1/2 % w/Recourse	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	27.4 x	x	1.4 x	5 =	.02% x	
71-80	47.0	77.4%	6.7	15	.37%	
81-90	20.0	77.4	14.1	20	.44%	
> 90	5.8	77.4%	24.1	30	.32%	
					1.15%	31.6

Southeast LTV	% of Portfolio	1-1/2 % w/Recourse	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	24.9 x	x	1.4 x	5 =	.02% x	
71-80	43.2	78.7%	6.7	15	.34%	
81-90	20.3	78.7%	14.1	20	.45%	
> 90	11.7	78.7%	24.1	30	.67%	
					1.47%	14

Midwest LTV	% of Portfolio	1-1/2% w/Recourse	Half of Texas 81/82 Origination Defaults	Half of %Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	29.0 x	x	0.7 x	3 =	.01% x	
71-80	44.3	77.8%	3.4	8	.09%	
81-90	20.4	77.8%	7.1	10	.11%	
> 90	6.4	77.8%	12.1	15	.09%	
					.29%	14.7
		Weighted Average Loss on Loan/MBS:			.84%	

Notes & Assumptions:

We assume recourse loan deals apply only to loans with greater than 70% LTV.

We assume half of all recourse arrangements fall through because of defaults by failing financial institutions.

Rate of defaults as percentage of numbers of loans equals Fannie Mae's experience on its loans originated during 1981 and 1982 in Texas. This cohort includes types of loans no longer accepted and was created under much weaker underwriting standards than currently in force.

Private Mortgage Insurance (PMI) is generally required on loans with greater than 80% LTV. We assume only half of PMI pays off because of insurer defaults.

Table 5
Doomsday Scenario
Freddie Mac - Hypothetical Losses

Northeast LTV	% of Portfolio	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	42.6 x	1.4 x	5 =	.03% x	
71-80	37.1	6.7	15	.37%	
81-90	14.5	14.1	20	.41%	
> 90	5.8	24.1	30	.42%	
				1.23%	28.5

West LTV	% of Portfolio	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	27.4 x	1.4 x	5 =	.02% x	
71-80	47.0	6.7	15	.47%	
81-90	20.0	14.1	20	.56%	
> 90	5.8	24.1	30	.42%	
				1.47%	31.6

Southeast LTV	% of Portfolio	Texas 81/82 Origination Defaults	%Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	24.9 x	1.4 x	5 =	.02% x	
71-80	43.2	6.7	15	.43%	
81-90	20.3	14.1	20	.57%	
> 90	11.7	24.1	30	.85%	
				1.87%	14

Midwest LTV	% of Portfolio	Half of Texas 81/82 Origination Defaults	Half of %Loan Loss Adjusted For PMI	%Loss on Region's Portfolio	Region's % to total Loans/MBS
0-70%	29.0 x	0.7 x	3 =	.01% x	
71-80	44.3	3.4	8	.11%	
81-90	20.4	7.1	10	.14%	
> 90	6.4	12.1	15	.12%	
				.38%	14.7
			Weighted Average Loss on Loan/MBS:	1.13%	

Notes & Assumptions:
Loan-to-value ratios are for Fannie Mae's portfolio. Freddie Mac's LTV's are similar, according to management. Freddie Mac does few deals with recourse to the loan originator. Rate of defaults as percentage of numbers of loans equals Fannie Mae's experience on its loans originated during 1981 and 1982 in Texas. This cohort includes types of loans Freddie Mac does not accept and was created nder much weaker underwiriting standards than Freddie Mac uses. Even in Texas, Freddie Mac's defaults were well below these levels, according to management.
Private Mortgage Insurance (PMI) is generally required on loans with greater than 80% LTV. We assume only half of PMI pays off because of insurer defaults.

Fannie Mae and Freddie Mac:
The Need for Federal Supervision
of Safety and Soundness and
Capital Adequacy Requirements

Statement of

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to the

The Subcommittee on Housing and Urban Affairs
Committee on Banking, Housing and Urban Affairs

United States Senate

February 7, 1990

Fannie Mae and Freddie Mac: The Need for Federal Supervision of Safety and Soundness, and Imposition of Capital Adequacy Requirements

Mr. Chairman, Members of the Senate Subcommittee on Housing and Urban Affairs:

Thank you for the invitation to participate in this hearing. Today, Fannie Mae and Freddie Mac are the largest financial institutions in the United States, with combined obligations and mortgage-backed securities (MBS) amounting to some $600 billion. All of these obligations and mortgage-backed securities carry an implicit federal guarantee that gives American taxpayers a fundamental stake in the financial safety and soundness of the two institutions.

In my testimony today, I would like to urge that this subcommittee take account of the lessons learned from federal oversight of banks with federally insured deposits and from the expensive failures associated with lax oversight and capital standards applied to the thrift industry. Three of these lessons are especially important:

- The federal government must supervise safety and soundness of institutions operating with implicit federal backing;
- The federal government must establish and enforce significant capital standards for such institutions; and
- The federal regulator must be empowered and directed to close a faltering institution before its market value reaches zero.

Not one of these three lessons has been applied to Fannie Mae and Freddie Mac today. The federal government does not capably supervise their safety and soundness, they are not subject to binding capital requirements, and their charter acts empower the two enterprises to continue to do business and issue securities with implicit federal backing long after they reach a negative net worth.

Fortunately, both Fannie Mae and Freddie Mac today are earning immense amounts of money. The time is now, before an enterprise again gets into trouble, to institute effective federal supervision of safety and soundness, effective capital standards, and a process for closing or restructuring an enterprise before its net worth drops to zero. Especially today, with Fannie Mae and Freddie Mac stock prices increasing in direct proportion to the difficulties of the thrift industry, it is time for the two enterprises to sell additional stock and increase their capital base to levels comparable to those now being required for thrifts and commercial banks.

Given the informal nature of the roundtable hearing, it is easiest to pose these issues in question and answer form:

1. What is the likely taxpayer exposure to loss from activities of Fannie Mae and Freddie Mac?

No one knows for sure. Much depends upon imponderable factors such as future financial circumstances and the quality of Fannie Mae's and Freddie Mac's management at times of financial stress. In the 1989 Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), the Congress for the first time required the Treasury Department to examine and analyze the federal contingent liability from activities of Fannie Mae and Freddie Mac. Unfortunately, under terms of the authorizing legislation, that Treasury activity will conclude on May 1, 1991.

Needed is an extension of that authority so that the Treasury Department is directed to monitor and report annually on enterprise safety and soundness. As the Senate Banking Committee has seen with the thrift industry, financial circumstances can vary dramatically even over a few years. The Federal Government must assess the financial risk of enterprises on a continuing basis.

2. What kinds of risk are involved in the activities of Fannie Mae and Freddie Mac?

Major risks involved with enterprise lending include credit risk, interest rate risk, operations risk, management risk, and market risk. For Fannie Mae and Freddie Mac, credit risk involves the possibility of loss from mortgage loan defaults. Interest rate risk, including prepayment risk, involves the possibility that an enterprise is vulnerable to losses from changes in the interest rate yield curve or the general level of interest rates. Interest rate risk was a significant factor in the failure of the thrift industry and in Fannie Mae's financial difficulties in the early 1980's.

Operations risk involves the ability of enterprise management to control the immense cashflows from mortgage servicers and to holders of obligations and mortgage-backed securities. Especially when an enterprise is growing by tens of billions of dollars a year, adequate information and control systems are essential to assure that the enterprise does not lose control of the quality of mortgages it purchases or of the ability to make timely payments to investors.

Management risk has been identified by federal bank regulators as the single most important kind of risk for a financial institution. Management must have integrity, prudence, and skill. Financial institutions are subject to changes in control; the presence of high quality management at one point does not assure that subsequent managers will be of equally high quality. Also, managers may lose prudence if the institution gets into difficulty and they seek to gamble their way back to profitability.

Finally, market risk is the risk that Fannie Mae and Freddie Mac, as specialized lenders, will run into some problem that affects a large proportion of their lending activities at the same time. This happened, for example, to Fannie Mae in the late 1970's when changes in interest rates and the yield curve permeated its entire portfolio lending business. Market risk also damaged the Farm Credit System when in the early 1980's the entire agricultural sector went into decline. As Professors Jack Guttentag and Richard Herring have pointed out, the problem with market risk is that it can involve remote risks with high potential costs that the institution may ignore until too late.1/

1/ Jack M. Guttentag and Richard J. Herring, "Prudential Supervision to Manage Systemic Vulnerability," 25th Annual Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, May 1988, pp. 602-633. The authors recommend increased regulatory attention to such market risk (footnote continued)

3. To what extent have Fannie Mae and Freddie Mac diversified these risks and thereby protected taxpayers against possible financial exposure?

Again, no one knows for sure. Freddie Mac has published reports showing that it has achieved significant geographic diversity, and thereby reduced credit risk, on its mortgage-backed securities.

Freddie Mac also points out that because it is largely a lender engaged in guaranteeing mortgage-backed securities it incurs little interest rate risk. By contrast to Freddie Mac, Fannie Mae has a substantial portfolio that could involve interest rate risk. Indeed, for the year 1988, Fannie Mae reported that the duration mismatch between its assets and liabilities increased compared to 1987. However, the company's interest rate exposure does remain far below the dangerous levels of the early 1980's.

No one in the Federal Government has properly assessed the quality of management information and control systems of Fannie Mae and Freddie Mac. Until the Treasury Department and the U.S. General Accounting Office finish their FIRREA mandated studies, the amount of credit risk, interest rate risk and operations risk of the two enterprises will remain unknown.

Finally, management risk is one kind of risk that has become more concentrated in the two enterprises rather than diversified. As Fannie Mae and Freddie Mac have grown, doubling in size over the past four years, the quality of Fannie Mae and Freddie Mac managers becomes a very important

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and capital requirements that relate to an institution's potential risk exposure, including off-balance sheet exposure. See Jack M. Guttentag and Richard J. Herring, Disaster Myopia in International Banking, Princeton University Essays in International Finance, September 1986, at pp. 27-30.

issue to taxpayers.[2] Management risk is especially important because, in contrast to banks and thrift institutions, the federal government has no capable regulator in place to monitor Fannie Mae's and Freddie Mac's management systems and management quality. Fannie Mae and Freddie Mac are now the largest financial institutions in the United States. As they continue their rapid expansion they -- and taxpayers -- are entering uncharted territory in terms of management and operations risks.

4. How does an enterprise fail?

Because of the implicit federal guarantee, and because of provisions in the Fannie Mae and Freddie Mac charter acts, both enterprises are permitted to continue business operations long after they have become technically insolvent. Even with a substantial negative net worth, each enterprise would be authorized to issue unlimited amounts of mortgage-backed securities carrying implicit federal backing. Additionally, under a more generous charter provision than is available to Fannie Mae, Freddie Mac could issue unlimited amounts of debt obligations even if it had a substantial negative net worth.[3]

As the federal government learned from the thrift crisis, the inability to stop a failing institution from continuing in business can greatly compound potential risk exposure of taxpayers. Even the most prudent financial institution managers have an incentive to take high stakes gambles if their institution founders. If a gamble succeeds, the managers and the enterprise shareholders gain; if -- as more often has been the case -- the gamble fails, taxpayer exposure is greatly magnified. This is an extreme example of the problem of "moral hazard" that arises from the implicit federal guarantee of enterprise obligations and MBS and from federal deposit insurance.

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[2] The quality of an institution's management is the single factor most correlated with bank failures at times of financial stress. See e.g., Office of the Comptroller of the Currency, "Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks," (1988); Robert L. Clarke, Comptroller of the Currency, "Banking in Troubled Times: What Hurts? What Helps? June 20, 1988.

[3] The new Freddie Mac Charter Act 12 U.S.C. 1452(b)(5), omits the debt-to-asset limitation contained in the Fannie Mae Charter Act, 12 U.S.C. 1719(b).

Both Fannie Mae and Freddie Mac lack in their charters any provision for the federal government to minimize taxpayer losses by appointing a conservator or receiver to reorganize or wind up the affairs of the institution if it gets into financial trouble.

5. How capable would the U.S. Department of Housing and Urban Development (HUD) be as a financial regulator of the two largest financial institutions in the United States?

Unfortunately, HUD has demonstrated neither the inclination nor the capability to become a financial regulator. HUD lacks a clear mandate to regulate Fannie Mae's or Freddie Mac's financial soundness, and also lacks the resources. Unlike other financial institution regulators, HUD is not authorized to assess Fannie Mae or Freddie Mac the cost of maintaining a capable regulatory staff compensated at competitive levels compared to salaries of the staff of federal bank regulators.

HUD officials admitted to the U.S. General Accounting Office in 1985 that the department lacks the capacity or expertise to be a financial regulator responsible for supervising Fannie Mae's risk-taking.[4] Since then, Fannie Mae has doubled in size, and HUD now has become the nominal regulator of Freddie Mac as well. The department is likely to be overwhelmed if it tries to become an active financial regulator of the two largest financial institutions in the United States.

So far HUD hasn't tried to be a financial regulator. HUD has never used its examination authority over Fannie Mae, even though that authority has been available since 1968. HUD has tended to concentrate on national housing policies, such as controversy over Fannie Mae's support of low-income housing in the late 1970's and controversy over privatization of Fannie Mae in the early 1980's, rather than on narrower matters such as Fannie Mae's financial safety and soundness.

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[4] U.S. General Accounting Office, "The Federal National Mortgage Association in a Changing Economic Environment," p. 116 (April 15, 1985).

6. How do Fannie Mae and Freddie Mac compare to thrift institutions and commercial banks with federal deposit insurance?

Like federal backing of thrift institutions and commercial banks, the implicit federal guarantee of enterprise obligations and mortgage-backed securities creates problems of moral hazard. The federal backing reduces market discipline that otherwise gives management incentives to be prudent. Unlike banks and thrift institutions, Fannie Mae and Freddie Mac are not backstopped by federal insurance funds.

That means that if losses exceed the capital of an enterprise, taxpayers rather than a federal deposit insurance fund are called upon immediately to pay off investors in federally-backed obligations and mortgage-backed securities. This happened when another government sponsored enterprise, the Farm Credit System, failed in 1985.[5] Finally, unlike banks and thrift institutions today, Fannie Mae and Freddie Mac are not capably supervised and are not subject to binding capital requirements.

7. Would taxpayers gain financial protection if Fannie Mae and Freddie Mac were capitalized at levels comparable to commercial banks?

Taxpayers would gain protection for two reasons. First, managers have added incentive to be prudent to the extent that more shareholder capital, and proportionately less taxpayer money, is at risk in lending decisions. Second, shareholder capital provides financial strength to help an institution absorb losses from unwise or unlucky management decisions and reduces the chance that a taxpayer bailout would be needed.

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[5] The federal government has now established a Farm Credit System (FCS) Insurance Corporation and assesses premiums on FCS institutions to help capitalize the insurance fund. 12 U.S.C. § 2277a.

Today, Fannie Mae and Freddie Mac are highly leveraged companies. Their capitalization is far below that of commercial banks. Fannie Mae at year-end 1988 had only $2.3 billion of shareholder capital to support $290 billion of assets and MBS; Freddie Mac had only $1.6 billion of shareholder equity to support $260 billion of assets and MBS. This amounted to 0.8 percent and 0.6 percent capitalization (i.e., shareholder leverage of 126:1 and 161:1) respectively and was substantially below the capital requirements established for commercial banks by the FDIC, Comptroller of the Currency, and the Federal Reserve Board.

The federal government applies two kinds of capital requirements to commercial banks, (1) minimum capital and (2) risk-based capital standards. Under a proposal of the Federal Reserve System, minimum capital standards would vary according to the financial strength of the institution as a whole; risk-based standards apply according to the credit risk of assets held or guaranteed by an institution.[6/]

The Federal Reserve System proposes setting minimum capital standards at three percent for the strongest institutions (those rated highest on their examination reports) and at levels above three percent according to perceived higher risk profiles of particular institutions. Among other provisions, the risk-based capital guidelines would apply a four percent standard for high quality residential mortgages an institution holds or guarantees. A financial institution is required to maintain enough capital to meet the higher of the two capital standards.

Capitalization at the three or four percent level, applied to each enterprise's total lending (including mortgage-backed securities), would increase the cushion of financial protection for taxpayers compared to today's thin capitalization of each enterprise. Standard & Poor's told the Department of Housing and Urban Development that, for

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[6/] Compare, Board of Governors of the Federal Reserve System, "Capital; Capital Adequacy Guidelines; Notice of Proposed Guidelines," 55 Federal Register, pp. 582 ff. (January 5, 1990); with, Federal Reserve System, "Capital; Risk-Based Capital Guidelines; Final Risk-Based Capital Guidelines," 54 Federal Register, pp. 4186 ff (January 27, 1989).

their mortgage-backed securities businesses, a two percent capital cushion for Freddie Mac and Fannie Mae would protect taxpayers up to an "A" (investment grade) level and four percent capital would protect taxpayers to a high "AAA" level.

By contrast, portfolio lending is more risky than guaranteeing mortgage-backed securities. Even at a four percent capital level, Standard & Poor's indicated that taxpayers would have at most "A" level protection on Fannie Mae's and Freddie Mac's portfolio businesses.[7] Analytically, Fannie Mae and Freddie Mac resemble banks with federally insured deposits; bank-type capital requirements are an appropriate standard for the two enterprises.

8. If we trust Fannie Mae and Freddie Mac management, why should we regulate them and require minimum capital levels?

The failure of thrifts and banks shows how hard it is beforehand to distinguish good managers from poor ones. The government examines and sets capital requirements for all federally-backed banks and thrifts, and not just those whose management is somehow suspect. Management quality is properly included as one element of systematic federal oversight of the safety and soundness of a financial institution.

Just as federal supervision and capital requirements do not imply distrust of any particular bank or thrift institution or credit union, imposition of such reasonable oversight and capital standards is not intended as a blemish on the reputations of the managers of Fannie Mae and Freddie Mac. Taxpayers have lent these two institutions the government's credit card; the two institutions are profiting nicely from using that credit card. The government must maintain vigilance in assuring that the credit card is not misused.

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[7] U.S. Department of Housing and Urban Development, 1987 Report to Congress on the Federal National Mortgage Association, pp. 49-57. These figures should be used only as rough guidelines; Standard & Poor's uses a variety of factors besides capitalization to assess financial risk of an institution.

It is also appropriate to set capital requirements. Once an institution gets into financial difficulty, it is costly if not impossible to raise new capital. The time for Fannie Mae and Freddie Mac to sell new stock is now, when they are widely recognized as being very profitable institutions.

9. What steps might this subcommittee take immediately to promote safety and soundness of Fannie Mae and Freddie Mac?

There are several important steps that the subcommittee might take:

- Call upon HUD to require that Fannie Mae and Freddie Mac supplement their quarterly financial statements with market value accounts and also report any material changes in market value accounts. Freddie Mac is to be commended for taking leadership in publishing market value financial statements, and it is time for Fannie Mae to follow suit;

- Extend the Treasury's 1990-1991 study of enterprise safety and soundness to become an annual Treasury report. As we have learned from the thrift debacle, the financial state of a specialized lender can change dramatically from year to year; it is important that the government actively monitor such changes;

- Request the Treasury Department or one of the federal bank regulators to provide a report on the proper level of capital to apply to Fannie Mae and Freddie Mac, to bring them into conformity with minimum and risk-based capital standards imposed upon commercial banks;

- Request a report from one of the federal bank regulators on staffing needs and supervisory powers necessary to enable the federal government to oversee safety and soundness of Fannie Mae and Freddie Mac in a manner comparable to federal oversight of commercial banks;

- Enact legislation empowering a federal regulator to appoint a conservator or receiver if ever one of the government sponsored enterprises were to get into financial difficulty or fail. Such legislation should be modeled upon the authority of the federal bank regulators and of the Farm Credit Administration, the regulator of the Farm Credit System; and

- Call upon Fannie Mae and Freddie Mac now to take advantage of today's favorable circumstances to issue new stock so that they can comply with bank-type capital standards within a reasonable transition period.

The 1980's provide clear lessons about the risks to American taxpayers when the federal government lends its credit support to private institutions but fails to supervise their safety and soundness or to require adequate shareholder capitalization. Fannie Mae came close to failure in 1981-82, the Farm Credit System failed in 1985, and hundreds of thrift institutions failed during the past decade. This subcommittee is to be commended for recognizing that federal credit support must be supervised and taxpayers must be protected. It is now time to apply these lessons to help assure the safety and soundness of Fannie Mae and Freddie Mac for the years to come.

Statement of

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before the

Subcommittee on Housing and Urban Affairs
Committee on Banking, Housing, and Urban Affairs
United States Senate

February 7, 1990

Mr. Chairman and Members of the Committee:

I am pleased to have the opportunity to participate in this roundtable hearing on the secondary mortgage market. My interest in this area began a number of years ago while a senior staff member in the economic studies program of the Brookings Institution. At that time I co-authored a study of federal credit programs. I am currently manager of mortgage research in the Fixed Income Research Department of the First Boston Corporation, where my responsibilities include the analysis of mortgage securities issued or guaranteed by government sponsored enterprises. I am also serving as the 1990 vice chairman of the Mortgage-Backed Securities Division of the Public Securities Association.

At the Committee's request, I am appearing today as an industry expert. I will express my personal views only as I am not appearing on behalf of First Boston or the Public Securities Association.

Federal Liability

Fannie Mae and Freddie Mac are owned and financed by the private sector. Their links to the government take the form of limited assurances of support in severe crises in return for responsibility for operating in accord with national goals. The mixture of private ownership, which provides a motive to innovate and minimize costs, with a public policy orientation has generally worked well. The advantages that come with GSE status are counterbalanced by charter restrictions, government oversight, and public interest activities.

In the event of a crisis, government policy would move to stabilize all important sectors of the economy, not only those where government sponsored enterprises exist. There is, in effect, an "implied guarantee" for the economy as a whole. In the past, the federal government has provided credit assistance to private corporations and municipalities to avert economic dislocation. In this context, the implicit guarantee of agency status does not constitute a large subsidy and differs only modestly from the implied guarantee against failure of any large private financial or nonfinancial institution.

The risks faced by Fannie Mae and Freddie Mac are predominantly of two types: market (interest rate) risk and default (credit) risk. Interest rate risk is minimized by matching the effective maturities of assets and liabilities. Interest rate risk affects only the portfolio part of the two firms' businesses. It should be noted that declines in interest rates can be just as deleterious as increases in market interest rates, if assets pay off sooner than liabilities mature.

Credit risk is controlled through geographical diversification of assets, careful underwriting, avoidance of excessively volatile investments, and reinsurance. Credit risk affects both portfolio investment and mortgage backed securities. High loan-to-value ratios are associated with high default rates. Weakness in the economy can also lead to higher defaults, but declining real housing prices by themselves would probably not affect the soundness of Fannie Mae and Freddie Mac. Real prices are prices adjusted for inflation. Declining real prices means that nominal house prices do not rise as quickly as prices elsewhere in the economy. If housing became more affordable as a result, there could potentially be greater mortgage volume for the two firms. But a decline in real housing prices with stable nominal prices would have no impact on their safety and soundness. There would be an impact only if there were a major decline in nominal housing asset values, because the liabilities of the two firms are denominated in nominal terms, not real terms.

In most cases, risk exposure can be quantified. That is to say, probable losses (if any) can be computed for alternative hypothetical economic scenarios. Rising and falling interest rate paths can be assumed, together with adverse default conditions. A firm would typically consider recent economic events--high interest rates, recessions, oil embargoes, and the like--and build in more than enough protection against a recurrence of the most severe set of conditions. Historical data can be used to assign probabilities to the different scenarios. Management's job is to assume only that level of risk that does not endanger the continued viability of the enterprise. In general, higher levels of loss reserves and capital will increase the probability that the entity would survive a catastrophic scenario. Of course, more protection against loss implies a reduction in the enterprise's mission, higher costs for its services, or both; such service cuts and cost increases often hit hardest at the most needy recipients. The task for Fannie Mae and Freddie Mac, and for those overseeing them, is to identify the benefits and risks and to determine the appropriate level of risk exposure.

Both Fannie Mae and Freddie Mac have followed business strategies in recent years to reduce risk. They have tightened underwriting requirements on residential mortgages to reduce credit risk. They have effectively reinsured many of their credit risks through recourse provisions with lenders. They have concentrated on mortgage backed securities more than on portfolio lending to minimize interest rate risk. And Fannie Mae, with its large loan portfolio, has reduced the maturity mismatch of its portfolio through adjustable rate lending and by issuing variable maturity liabilities.

The statutory relationship between the government and Fannie Mae and Freddie Mac is important to investors, for a variety of reasons. Most observers focus only on the widely held belief that the federal government would intervene to prevent bondholder losses in the case of a major economic collapse--the "implicit guarantee." Equally important, however, is the perception that federal government policy ensures the continued health of these enterprises through the oversight process. Another factor often overlooked is that Fannie Mae and Freddie Mac are immune from leveraged buyouts and other forms of "event risk" that can quickly alter the credit rating of even a high quality private enterprise.

Cost Effectiveness

The government sponsored enterprises continue to play an important role in the economy. They are still needed because of remaining barriers to the free flow of capital in the financial system. They provide a source of innovation and a means of extending credit to borrowers who would not otherwise be served, with or without subsidies. Perhaps most important, they ensure continued stability in the housing sector in the event of a widespread financial crisis.

Fannie Mae and Freddie Mac are highly efficient operations due to superior information, economies of scale, and lower administrative expenses. A majority of these advantages have been passed through to homebuyers.

The nature of the relationship between the government and Fannie Mae and Freddie Mac has changed over the years. They have gradually shed many of their government linkages. This process of partial "privatization" has been consistent with the increasing maturity and sophistication of the secondary mortgage market. Many of the remaining linkages, although symbolic, probably have little practical value by themselves. For example, while the authority to borrow from the Treasury is important, the amount of borrowing authority is probably much less important. Nevertheless, these two firms would probably change their business strategies were it not for their charters. It is likely that full privatization would diminish the benefits accruing to homeowners.

Numerous private institutions have become active in the secondary market, although most do not compete with Fannie Mae and Freddie Mac for the business of conforming loans. The market for "private label" mortgage securities has grown rapidly in recent years. There is a limit, however, to the capacity of the private sector to provide credit support under the "worst case" conditions imposed by the rating agencies. In order to provide the lowest possible mortgage rates to homebuyers, mortgage securities must carry a double-A or triple-A rating. Mortgage loans by themselves do not warrant a credit rating as high that. Therefore, some form of external credit support is required, either by guarantee from Fannie Mae, Freddie Mac, or other highly rated guarantor, or by the willingness of some investors to accept a subordinated interest (first loss) in a pool of loans. Private investors and guarantors, however, would withdraw their support from the market during cyclical downturns. A shift toward greater privatization in the secondary mortgage market would introduce greater volatility and higher mortgage rates.

Safety and Soundness

There are some similarities and some differences in the risks faced by Fannie Mae and Freddie Mac compared to those faced by the thrift industry. All portfolio investors must manage the maturities of their assets and liabilities to guard against market losses when interest rates move sharply. Both the thrift industry and Fannie Mae did a poor job of this in the early 1980s; Freddie Mac did not have a sizeable portfolio at the time. Since then, Fannie Mae and Freddie Mac have done a better job of matching assets and liabilities than has the thrift industry on average. Most of the current problems of the thrift industry are attributable to its investments in commercial mortgages, business loans, real estate development, and other speculative investments; Fannie Mae and Freddie Mac are precluded by charter from these investments.

It would be premature at this time to form a judgment as to the appropriateness of the GSEs' risk-return balance. The studies being conducted by the GAO and the Department of the Treasury, in conjunction with data and analyses from the enterprises themselves, will provide a basis for such conclusions.

While Fannie Mae and Freddie Mac should be resistant to normal business cycles and occasional financial shocks, we should not necessarily expect them to cope with a replay of the Great Depression. That would impose costs that might prevent them from performing their missions. One could hypothesize a scenario of negative economic growth, increasing unemployment, and declining nominal asset values that would put pressure on Fannie Mae or Freddie Mac. But in the event of a serious downturn in the economy, they would be viewed as the principal means of restoring stability and reviving economic activity in the housing sector. Indeed, both firms are to play large roles in the disposition of mortgage assets from failed thrift institutions under FIRREA.

Fannie Mae and Freddie Mac, like other regulated financial institutions, should have minimum capital requirements. Ideally, the capital should be measured on a "real" or "current value" basis, although this presents certain methodological difficulties. The required level of capital should be determined separately for each firm and should be consistent with the riskiness of its overall portfolio.

Fannie Mae and Freddie Mac are solidly capitalized firms with good prospects for earnings growth. They may be able to meet higher capital requirements through retained earnings.

If higher requirements were to require slower growth and/or additional equity, the costs would be passed through to mortgagors. Capital market investors would shift funds to other sectors before accepting lower yields on agency debt or mortgage backed securities. There would be higher interest rates on mortgages and less availability of funds for housing. Also, if imposed too quickly, higher capital requirements could disrupt the market and cause a greater shock to the housing finance system.

Oversight

Positive levels of real capital provide an incentive for shareholders to monitor the performance of a firm. The shareholders of both Fannie Mae and Freddie Mac have substantial stakes that ensure ongoing scrutiny of risk.

Market discipline is also exerted by bondholders. Investors are generally willing to accept a lower interest rate on agency debt than on purely private debt, all other things being equal. Under ordinary circumstances, however, the agency status is an incremental, not absolute, credit enhancement. The financial health of the entity, independent of government support, enters into the investor's decision. As evidence, one can compare the interest rates paid on a given entity's debt with some benchmark, such as U.S. Treasury securities of a comparable maturity. There exists a substantial variation in interest rates on similar debt across the GSEs, and a given entity will pay different rates at different points in time as its perceived financial condition varies. The existence of an implicit guarantee does not remove the incentive for these enterprises to operate in a safe and profitable manner.

The structure and governance of Fannie Mae and Freddie Mac provide additional market discipline, despite their preferred status in the credit markets. A broad range of views on the Boards of Directors of these enterprises is ensured by charter. Private market participants such as accounting firms, investment banks, and rating firms perform careful analyses of financial condition in connection with annual reports and securities issues. Neither members of the Board nor these other entities can rely on an implicit guarantee to relieve them of their professional and fiduciary responsibilities.

Liability Fees

User fees are not necessary to cover costs; there has never been a payment from the government to Fannie Mae (in its present form) or Freddie Mac. The charges would be passed through to borrowers rather than to investors, because investors have other alternatives, thereby raising the cost and reducing the availability of funds for housing.

In the past, such charges have been justified as a means of equalizing the cost structures of the GSEs with those of alternative private entities. To the extent that the lower cost structures of Fannie Mae and Freddie Mac are the result of operational efficiencies, user fees would act as a penalty on efficiency. Also, it should be noted that depository institutions do not pay insurance premiums on their nondeposit borrowings, collateralized or not. The debt and mortgage backed securities of Fannie Mae and Freddie Mac are more akin to these open market borrowings of depository institutions than they are to deposits.

The collection of user fees from Fannie Mae and Freddie Mac would reinforce the market's perception that the government stands behind these firms. Deposit insurance assessments paid by banks and thrifts are earmarked for a reserve fund in connection with the government's explicit full faith and credit deposit guarantee. To the extent that user fees on Fannie Mae and Freddie Mac were seen as a reserve against possible losses, the market discipline imposed by investors may be reduced. While Fannie Mae and Freddie Mac currently show no predilection for increased risk-taking, overall safety and soundness may be impaired rather than improved by the imposition of user fees.

STATEMENT OF

JOHN C. SITES

SENIOR MANAGING DIRECTOR

BEAR, STEARNS & COMPANY

NEW YORK, NEW YORK

BEFORE THE

SUBCOMMITTEE ON HOUSING AND URBAN AFFAIRS

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

UNITED STATES SENATE

GOVERNMENT SPONSORED ENTERPRISES

IN THE SECONDARY MARKET

FEBRUARY 7, 1990

Mr. Chairman and Members of the Committee, my name is John Sites, and I am a Senior Managing Director with Bear, Stearns and Company in New York. Bear Stearns is among the leading firms in the underwriting and trading of mortgage-backed securities, and we have been actively involved in the programs of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation.

Given the recent crises in the Farm Credit System and the savings and loan industry, it is entirely appropriate that Congress review the potential risk of Federal liability for losses at government sponsored enterprises. I am aware of on-going analyses by the Treasury, the GAO, and HUD as mandated by the Financial Institutions Reform Recovery and Enforcement Act. It is not my intention to comment on the financial soundness of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. This is best left to others. Rather, I want to clearly point out that these two agencies are a key element of home mortgage financing and provide a unique benefit to homebuyers and investors. The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation have performed their mission extremely well. I am not an expert in legislative nuance, but I think that most of us would agree that the primary goals of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are to promote and expand an active secondary market for home loans. Mortgage-backed securities have evolved into an important part of the fixed-income market. To put this in perspective, it is now larger than the municipal bond market and roughly the size of the corporate bond market, including lower grade bonds. The mortgage-backed securities market is now extremely liquid, the investor base has broadened substantially in the past 5 years, and households, particularly those with moderate incomes, have been able to achieve homeownership because of lower mortgage rates and the availability of funds for mortgage loans.

A few key statistics show the tremendous change that securitization has brought about in the sources of capital for mortgage lending. There is over $3 trillion of mortgage debt in the US, and nearly $900 billion had been securitized and was still outstanding by the end of 1989. The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation accounted for nearly 60 percent of the total securitized mortgages outstanding. Moreover, the percentage of mortgages being securitized has been increasing over time. This represents a very liquid market exceeded only by the Treasury market. The transformation of ordinary mortgage loans into widely held securities has been a major achievement of these agencies. Moreover, both the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation have been able to standardize and improve their underwriting standards, which has also facilitated growth in the market.

This last point is very important. Variable underwriting standards create uncertainty and make comparisons difficult and costly. This results in lessened liquidity and inconsistent pricing, characteristics of inefficient markets which are unlikely to have broad appeal.

Let me contrast our housing finance market with that of the United Kingdom. In both countries the percentage of homeownership is approximately the same (more than

50 percent). Yet, of the $255 billion of residential mortgages issued in the United Kingdom, only $12 billion have been securitized. The fact that mortgages in the United Kingdom have floating rates insures a reasonable capital flow in the market, but homeowners are subject to enormous swings in their payments. In the United States, adjustable rate securities have both periodic and lifetime caps, thus offering protection unavailable in the United Kingdom.

Along with the increased securitization has been the development of debt instruments backed by mortgage-backed securities — REMIC's (Real Estate Mortgage Investment Conduit). Bear Stearns is proud of the fact that it underwrote the first agency REMIC for the Federal National Mortgage Association. The CMO market has increased from $11.5 billion of issuance in 1984 to $94.2 billion last year. From negligible levels prior to 1988, agency issuance exceeded 80 percent of the total in 1989.

REMIC's issued by the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are preferred to privately issued REMIC's. They trade at a higher price because of the high name recognition, standardization of certain procedures, and the market perception of management quality. The higher, more efficient pricing in the REMIC market translates to lower mortgage rates to home buyers.

The development of the CMO market has significantly broadened the investor base for mortgage-backed securities. In addition to traditional investors, commercial banks, life insurance companies, pension funds, investment funds, and a growing number of foreign investors are active participants in this market. As the market continues to increase its size and broaden its base, the result is greater stability in the market, a continuing flow of capital for housing, and lower mortgage rates.

Up to this point, I have described the benefits that the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation have brought about, mostly to investors and homebuyers. This is a success story of public foresight coupled with private initiative. While effective oversight is a necessary objective, we must not lose sight of the past contributions of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation through a very difficult period and the potential that both offer to the future.

Now we have to address the cost side of the analysis, namely the implicit guarantees accorded the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. While capital adequacy is ultimately a question for policy-makers and not the subject of my statement, I do wish to make a few points about the risk exposure of the secondary market agencies. By mandate, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are restricted to the housing market and cannot diversify. Within these constraints, most would agree that their interest rate risk has been substantially reduced over time. Their assets are geographically diversified, and the credit risk is minimal compared to aggregate default/delinquency statistics. Realistically, it would require an unprecedented economic crisis to threaten their viability.

It is quite clear that the nation's housing policy receives a great boost from the operation of the secondary mortgage market and that the implicit Federal guarantee of agency securities is critical to the efficient operation of the market. So we know what the benefits are. The question is managing the risk to the Federal Treasury of the implicit guarantees. I would argue that it is not realistic to impose controls aimed at protecting against an extreme downturn in the economy, but that it is very important to maintain a degree of oversight sufficient to ensure that normal business cycle fluctuations in interest rate or credit risk exposure do not bring about a crisis.

Therefore, I must admit to being a little puzzled by some of the criticisms of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. Focusing on another massive bailout is not a useful exercise. The problem with the savings and loan industry's oversight was that it did not protect against losses in a normal business cycle. If we have exposure at the secondary mortgage agencies in a normal cycle, we should address the level of oversight. But as I noted above, it is my judgment that the risk control practices of the two agencies are basically sound and thus able to protect against failure under all but the most extreme economic conditions.

I appreciate the opportunity to speak here today. I am fortunate to have seen the development of the mortgage-backed securities market almost from the beginning. It is not my intention to be a cheerleader for the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation – we have had our differences. However, if you look at their mandate, the successful establishment and growth of the secondary market for mortgages speaks for itself.

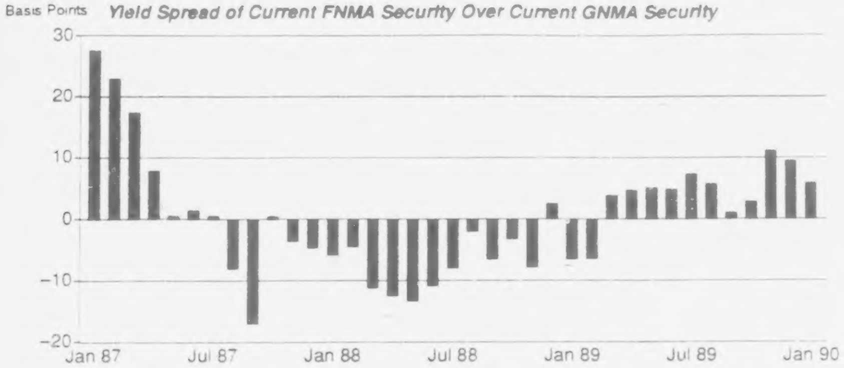
AGENCY	YEAR	ORIGINAL BALANCE	OUTSTANDING BALANCE
FNMA			
FIXED			
	1981	717,389,471	231,074,535
	1982	12,343,259,657	4,579,251,996
	1983	13,291,045,482	2,972,419,477
	1984	11,003,771,713	3,299,228,976
	1985	19,717,847,978	6,437,231,000
	1986	56,010,575,633	37,602,117,454
	1987	54,054,251,019	44,344,385,357
	1988	33,191.390,166	30,219,121,141
	1989	53,614,084,844	52,547,498,243
TOTAL FIXED		253,943,615,962	182,232,328,179
ARM			
	1982	1,358,495,798	249,428,223
	1983	7,507,225	1,467,934
	1984	2,795,757,114	760,630,620
	1985	3,960,911,210	1,494,881,130
	1986	6,328,538,820	3,063,626,344
	1987	8,791,189,534	6,368,658,097
	1988	21,731,282,094	17,941,770,573
	1989	17,079,154,178	16,015,119,982
TOTAL ARM		62,052,835,973	45,895,582,904
TOTAL FNMA		315,996,451,936	228,127,911,083

AGENCY	YEAR	ORIGINAL BALANCE	OUTSTANDING BALANCE
FHLMC			
FIXED			
	1972	226,027,639	37,903,649
	1973	614,750,885	109,023,171
	1974	112,828,569	17,769,010
	1975	542,625,336	106,438,673
	1976	1,227,756,558	304,679,353
	1977	4,456,562,381	1,330,860,433
	1978	5,449,480,116	1,984,652,800
	1979	3,937,068,549	1,422,149,852
	1980	2,507,848,500	486,047,054
	1981	3,488,878,667	754,898,618
	1982	23,927,770,554	8,797,157,687
	1983	19,950,546,865	6,208,449,507
	1984	18,944,289,577	6,099,983,729
	1985	39,566,177,583	13,490,328,870
	1986	98,968,705,064	65,344,727,448
	1987	72,870,723,498	59,468,881,725
	1988	32,892,227,123	29,814,321,247
	1989	54,526,749,694	53,429,744,452
TOTAL FIXED		384,211,017,156	249,208,017,277
ARM			
	1986	1,624,287,894	915,316,791
	1987	4,990,748,324	3,273,783,822
	1988	7,727,839,935	6,474,712,883
	1989	18,067,856,302	16,796,057,936
TOTAL ARM		32,410,732,455	27,459,871,433
TOTAL FHLMC		416,621,749,611	276,667,888,710

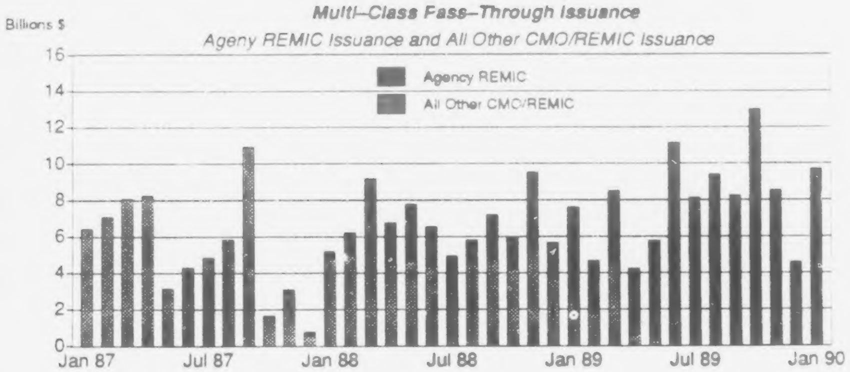
AGENCY	YEAR	ORIGINAL BALANCE	OUTSTANDING BALANCE
GNMA			
FIXED			
	1970	312,199,375	56,933,090
	1971	2,732,782,947	524,011,614
	1972	2,650,080,860	687,981,451
	1973	2,777,087,183	753,886,161
	1974	4,341,953,247	1,282,119,374
	1975	7,199,338,114	2,387,484,279
	1976	13,671,447,328	5,224,316,374
	1977	16,599,992,895	7,820,062,924
	1978	15,214,614,395	8,053,298,231
	1979	24,659,740,013	13,847,167,634
	1980	20,285,556,557	7,240,622,893
	1981	14,745,811,220	2,449,061,563
	1982	15,717,856,589	1,733,047,408
	1983	50,852,980,754	14,565,646,421
	1984	28,193,028,160	6,631,845,373
	1985	45,929,628,216	18,564,943,529
	1986	100,746,597,547	82,877,394,553
	1987	93,750,182,759	84,908,888,005
	1988	55,263,334,036	52,479,623,003
	1989	56,690,674,385	55,898,536,079
TOTAL FIXED		572,334,886,579	367,986,869,957
ARM			
	1984	15,995,233	8,251,033
	1985	101,190,381	74,377,068
	1986	963,316,774	767,636,556
	1987	2,068,650,210	1,875,034,672
	1988	1,777,405,987	1,672,412,846
	1989	520,166,336	511,737,609
TOTAL ARM		5,446,724,920	4,909,449,784
TOTAL GNMA		577,781,611,517	372,896,319,740

REMIC ISSUANCE
($ Billion)

	TOTAL	FNMA	FHLMC
1984	$11.5		
1985	15.8		
1986	48.9		
1987	64.2		
1988	80.6	11.2	15.0
1989	94.2	40.6	38.6

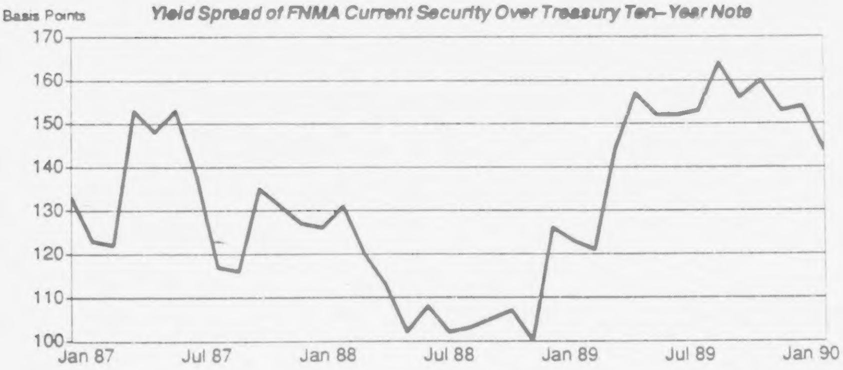


Yield Spread of Current FNMA Security Over Current GNMA Security



Multi–Class Fass–Through Issuance

Ageny REMIC Issuance and All Other CMO/REMIC Issuance



Yield Spread of FNMA Current Security Over Treasury Ten–Year Note

Comments On The Safety And Soundness Of Fannie Mae And Freddie Mac

by

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February 5, 1990

Comments on the
Safety and Soundness of Fannie and Freddie Mac

Fannie Mae and Freddie Mac present three types of risk: (1) interest rate risk; (2) default risk; and (3) changing the nature of the busines risk. The first two types of risk refer to the way in which Fannie Mae and Freddie Mac currently do business. The third type of risk arises when the corporations change the fundamental way in which they conduct business. The first two types of risk can be measured, or at least estimated. The third type of risk is less easily quantified.

Interest rate risk occurs because the assets and liabilities of Fannie Mae and Freddie Mac are sensitive to changes in interest rates. Depending upon the structure of their assets and liabilities, the corporations may be exposed to losses when interest rates rise, when interest rates fall, or, possibly, both. Historically, Fannie Mae purchased and held in portfolio long-term, fixed-rate residential mortgages and funded these assets with short-term liabilities. When rates increased, the cost of funding could increase dramatically, while revenues from assets remains fixed. If rates declined, the cost of funding would have declined, but mortgagors would have refinanced their loans so that revenues would have declined in tandem with funding costs. Thus, historically, Fannie Mae presented an interest rate risk similar to that of a traditional Savings and Loan Association.

The interest rate risk presented by Freddie Mac appears to be greatest when interest rates decline. When Freddie Mac issues participating certificates (essentailly mortgage backed securities), the corporation receives a claim for future income in the form of a guarantee fee. This fee will continue to be paid (and Freddie will continue to receive revenue) as long as the mortgage is outstanding. If the mortgage is paid off, this source of income will be lost. Because mortgagors tend to pay off their loans (i.e., refinance them) when rates fall, the interest rate risk exposure of Freddie Mac appears to be greatest when interest rates decline.

Mortgage default risk is more straightforward for both corporations. Both Fannie Mae and Freddie Mac are exposed to risk when property values decline and mortgagors default on their loans. This risk is limited to some extent by private mortgage insurance. It is further reduced when mortgagors have substantial equity in their houses.

Both interest rate risk and mortgage default risk are manageable risks. Interest rate risk can be managed by means of hedging strategies and asset/liability matching strategies. Mortgage default risk can be managed by reducing the acceptable loan-to-value ratio for loans purchased. Additionally, relatively simple measures can be used to measure and observe the amount of interest rate and default risk embedded in the corporations' asset and laibility portfolios. For example, one important measure of default risk is the loan-to-value ratio of the corporation's mortgage portfolio. Of course, a simple average is not a sufficient measure, but the distribution of loan-to-value ratios for the entire portfolio does provide substantial information about the default risk embedded in the portfolio. Similarly, various interest rate "gap" measures have been developed for estimating the degree of interest rate risk contained in a particular asset/liability structure. These measures can be supplemented by "financial planning" or simulation models that analyze the corporations' ability to survive various economic environments.

The greatest risk arises from the possibility that Fannie Mae and Freddie Mac may alter the nature of their business in an unexpected way. Such unexpected changes cannot be analyzed in advance. For example, one way in which the corporations could change their business is to begin to purchase loans with higher loan-to-value ratios. In so doing, the corporation would be increasing its default risk. Alternatively, the corporations could shift away from their current financing strategies which attempt to minimize interest rate risk exposure. A shift of either type would increase the risk of loss and neither can be anticipated.

There are two ways of controlling or minimizing the risk to taxpayers presented by Fannie Mae and Freddie Mac. The first is by increasing their capital requirements and the second is by increased monitoring of their activities. Of these, the most efficient is probably increased capital. However, increased capital probably also increases the cost to the corporation of doing business. To the extent that this cost is passed on to mortgagors, the use of increased capital to control risk reduces the benefits that Fannie Mae and Freddie Mac bring to the mortgage market. Increased monitoring does not have a direct cost to the corporations. However, to the extent that monitoring reduces their flexibility, it does generate an indirect cost to the corporations. Undoubtedly, so long as Fannie Mae and Freddie Mac receive a conjectural government guarantee, taxpayers will bear some risk. Also, it is very likely that this risk will continue to be be controlled by a combination of capital and oversight. Unfortunately, it is not possible to identify an optimal level of either. Perahps the best that can be achieved is to establish an acceptable level of interest rate risk and default risk and insure that capital is adequate for these risks. Then, monitoring is required to insure that the corporations do not fundamentally alter their business activities in a way that increases risk unexpectedly.

JUDGING FREDDIE MAC'S CAPITAL ADEQUACY

Testimony Prepared for the
Senate Subcommittee on Housing and Urban Affairs

by

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February 7, 1990

I am pleased to address the Senate Subcommittee on Housing and Urban Affairs today on the very important subject of capital adequacy for government sponsored entities (GSEs), and in particular for the Federal Home Loan Mortgage Corporate ("Freddie Mac"). Given our recent experience with the savings and loan sector, the Congress has every reason to concern itself with the nature and extent of the government guarantees provided for private financial market transactions.

Freddie Mac resembles an insured depository intermediary in many ways. Both are privately owned and managed and both enjoy a governmental guarantee of their debt obliuations that (at least partly) insulates them from traditional forces of market discipline. (Freddie Mac's government guarantee includes both a formal line of credit from Treasury and a conjectural guarantee of its obligations.) The banking literature clearly indicates that this sort of guarantee can lead a firm's shareholders to choose an unduly risky mode of operations, with attendant social inefficiencies and costs. Government guarantees must therefore be accompanied by regulations, primarily in the form of capital standards and restrictions on the permissible activities of insured firms. Moreover, the appropriate amount of capital for a GSE will depend importantly on its set of permissible economic activities.

I. The Congress' Intent to Subsidize Secondary Mortgage Markets

Congress at one time decided to encourage the private market's evolution of secondary mortgage financing devices. Such encouragement has taken the form of Federally-guaranteed borrowings by Freddie Mac and FNMA, among other things. I am unfamiliar with the Congress' reasoning in determining that housing should be subsidized in this fashion. However, simple economic analysis indicates that the subsidy is determined in large part by the Treasury's assumption of some of the credit risk associated with secondary mortgage transactions. Put another way, if Treasury assumes no risk in guaranteeing Freddie Mac's obligations, there is no current subsidy being provided by the Federal government to this activity.

Because a firm's equity capital represents the residual claim on earnings, equity absorbs much of the risk in business outcomes. Only after equity has been entirely consumed do bond-holders and other creditors suffer any loss. Accordingly, we must judge the appropriateness of current Freddie Mac capitalization by whether the potential costs to Treasury are in accordance with the desired amount of the subsidy to be provided to secondary mortgage markets. Ultimately, Congress must make this determination. However, economic analysis can identify the amount and extent of such risks, and render a framework for determining whether Freddie Mac is currently "well" capitalized (as opposed to "adequately" capitalized).

An assessment of Freddie Mac's capitalization depends on whether creditors (including, in this case, the Federal Treasury) are likely to suffer losses as a result of the firm's operating fortunes. Creditors' risk is determined by two broad factors:

1) The risk inherent in the firm's current book of business.

2) The possibility that the firm will substantially change its operating risk.

II. Evaluating Freddie Mac's Current Business Risk

Freddie Mac currently uses two basic techniques for identifying its risk exposure: stress scenarios and an assessment of its interest rate risk exposure. Both of these analyses are conducted in a highly professional fashion. They fully consider the primary risks to Freddie Mac's survival (and therefore to its creditors and guarantors). In short, I believe that these are appropriate techniques for evaluating Freddie Mac's current business risks.

Credit Risk Exposure

The two stress scenarios evaluate Freddie Mac's ability to withstand different combinations of interest rate shocks and credit losses. The Great Depression scenario (which is a modification of Moody's test for rating private mortgage insurance companies) primarily demonstrates the firm's ability to withstand severe credit losses. The Liquidity Crunch scenario combines a more moderate credit "hit" with a sharp interest rate shock. Both scenarios employ a sophisticated model of loan defaults and prepayments to estimate losses. Simulation results indicate that Freddie Mac easily survives the Liquidity Crunch scenario, but reaches GAAP insolvency during the tenth year of the Great

Depression scenario. Based primarily on this latter result, Freddie Mac staff conjecture that Moody's would rate the firm's obligations "Aa" in the absence of a Treasury guarantee.

This technique for judging capitalization is both relevant and informative. The modelling is sophisticated, and the shocks administered in these two scenarios are severe. Freddie Mac's simulated ability to survive such shocks indicates that its capitalization is very strong. I would feel more comfortable with the implied stability of Freddie Mac if these disaster scenarios were repeated for a (somewhat) broader range of modelling assumptions. (In particular, Freddie Mac staff should augment their simulations -- primarily to assure that the firm's implied stability is not attenuated by alternative plausible assumptions about prepayments, losses, or the type of new business undertaken during the scenario.) However, I doubt that reasonable variations in the simulations would reverse the implication that Freddie Mac's current book of business is quite well capitalized. In other words, Freddie Mac's failure due to credit losses is extremely unlikely if it continues to operate as it currently does.

Interest Rate Risk Exposure

Unlike a depository intermediary, Freddie Mac does not hold for its own account the vast majority of the mortgages it guarantees. Rather, the purchasers of Freddie Mac participation certificates, CMOs and other MBS assume the interest rate risks generally associated with holding mortgages in a portfolio. In fact, Freddie Mac's current managerial goal is to insulate the firm's profitability from changes in market interest rates. This is a commendable goal, which can be attained by selecting an appropriate "retained" portfolio of mortgage loans and an appropriate liability book for the funds used to finance the retained portfolio. Moody's Corporate Credit Report (October 1989, page 5) indicates that the firm has generally attained its goal of limiting interest rate risk: "Moody's believes that Freddie Mac's economic value is relatively unresponsive to interest-rate fluctuations, although wide and rapid interest-rate changes will affect this economic value."

The firm's evaluation of interest rate risk is incorporated into its innovative "Mark to Market" (MTM) balance sheet reports. Freddie Mac analysts adjust their GAAP asset and liability values to reflect current market valuations of similar securities. This sort of technique is difficult and technically challenging, but it is undertaken daily at large banking organizations around the world. Freddie Mac can evaluate the interest-sensitivity of its MTM book, to determine whether its retained mortgage portfolio effectively hedges the firm against market rate changes. I am not fully familiar with the details underlying Freddie Mac's MTM analysis, though their procedures seem to be quite standard and reasonable. The reports generated by this process should enable outsiders to assess Freddie Mac's exposure to interest rate risk, as well as changes in that exposure over time.

As I indicated above, no reasonable amount of capital can entirely prevent all possibility of failure and creditor loss.

However, these models and analytical techniques can effectively measure the likely losses. (From this information, we could compute the amount of subsidy being provided by Congress to Freddie Mac.) My strong impression is that Freddie Mac's current business is very well capitalized at the present time.

III. The Risk of a Shift in Freddie Mac's Business Operations

The more difficult risk to assess, from the Treasury's perspective, is that of a considered, deliberate change in operating risk by Freddie Mac managers. Though the firm's charter confines it to a relatively limited set of activities, there is ample room within that charter's provisions to increase the business risk undertaken.

In this regard, I believe that the most appropriate policy response is carefully monitoring Freddie Mac's performance and management decisions. The business of guaranteeing mortgage portfolios' repayment is relatively sophisticated, but it is also rather homogeneous. The primary risks to be evaluated and monitored include credit risk and interest rate risk exposure, and techniques exist throughout the private sector for measuring and evaluating both types of risk.

The challenge is to design report formats, intervals, and control mechanisms that provide sufficient government oversight, while permitting Freddie Mac an adequate amount of flexibility to pursue evolving market alternatives. Judging from recent history in the thrift industry, this is a difficult course to steer.

However, in the case of Freddie Mac, five of its eighteen new directors are appointed by the President, and therefore do not represent shareholders' interests. Whatever other requirements are imposed on Freddie Mac, it seems that these five directors could be charged with monitoring planned changes in Freddie Mac's business risk, much as government-appointed directors at troubled thrifts have served to ensure that management pursues appropriate risk management policies.

IV. Summary and Conclusion

The analytical tools used by Freddie Mac to assess its credit and interest-rate risk exposures are appropriate to the task and professionally implemented. The firm's current operating strategy involves much less risk than, for example, a typical savings and loan association's. Accordingly, Freddie Mac needn't hold as much capital as the OTS requires of insured thrifts. In fact, Freddie Mac staff simulations credibly indicate that it can comfortably get along with a good deal less than the 4% capitalization that will eventually be required of insured thrifts. This should continue to be true so long as Freddie Mac does not substantially increase its operating risk.

To protect itself against large losses from a change in Freddie Mac operating risks, Congress should ensure that an accurate and timely reporting system about Freddie Mac operations is implemented by a reliable government overseer. While the overseer must be fully informed about Freddie Mac risk exposures at all times, s/he should not be required to approve most business decisions in advance. Finally, the Congress must (somehow) assure that this overseer is equipped with both the will and the authority to respond promptly to any indicated changes in Freddie Mac's operating risks.

CHEMICALBANK

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Statement of

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Before the
Senate Subcommittee on Housing and Urban Affairs
on Government Sponsored Enterprises
in the Secondary Mortgage Market:
the Safety and Soundness of Fannie Mae and Freddie Mac

February 7, 1990

SUMMARY

-- In recent years, commercial banks have made a major commitment to the residential mortgage business. Their success is evidenced by the fact that banks have recently surpassed thrifts, the historic leaders in the field, in new mortgage originations.

-- Fannie Mae and Freddie Mac have been instrumental in developing liquid markets for mortgage instruments thereby enhancing the flow of capital to this sector with the ultimate beneficiary being the American homeowner.

-- Commercial banks therefore have a vested interest in the continued viability of Fannie Mae and Freddie Mac.

-- Concerns have been raised regarding adequate capitalization standards and appropriate levels of Federal Government regulation for these GSEs.

-- Both Fannie Mae and Freddie Mac have operated their businesses in a prudent manner with sensitivity to prepayment risk and credit risk. As a result, the losses sustained by the thrift industry cannot be viewed as a predictor of future gains or losses of Fannie Mae or Freddie Mac.

-- If revisions to the applicable capitalization rules are deemed necessary, such revisions should reflect an insightful understanding of the complexities of mortgage instruments and the sophisticated tools employed in their management.

-- If further regulation of ongoing operations is considered advisable, the expected benefit therefrom should be carefully weighed against the practical effects on the operations of Fannie Mae and Freddie Mac. More importantly, the broader ramifications of such rules on homeownership should be considered of paramount importance.

Mr. Chairman and Members of the Subcommittee, my name is Robert R. Rupp. I am a Managing Director at Chemical Bank in New York – one of the largest commercial banks in the United States and one of the nation's top 25 mortgage originators.[1] I am responsible for all secondary market activities in residential mortgages including hedging, trading, securitization, sales and research. In addition, I am responsible for our wholesale mortgage origination group.

I appreciate the opportunity to testify today about Government Sponsored Enterprises ("GSEs") that directly support the secondary mortgage market, specifically, the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac"). I am appearing today to express my own views and not those of Chemical Bank or any of its affiliates.

I. BACKGROUND

Over the past nineteen years, the Department of Housing and Urban Development has kept monthly statistics regarding nationwide originations of mortgages. In June 1989, commercial banks' share of mortgage originations surpassed those of the thrifts for the first time since those statistics have been compiled.[2] This development reflects the fact that, over the past several years, commercial banks have developed and expanded their commitment to consumer lending with specific attention to the residential mortgage sector. As a result, the continued viability of Fannie Mae and Freddie Mac has taken on new importance to the commercial banking industry.

Fannie Mae and Freddie Mac have played a major role in increasing home ownership by improving the liquidity of mortgage instruments and thereby enhancing the ties between mortgage originators and the capital markets. By many estimates, their participation has caused consumer mortgage rates to be one quarter to one half a percentage point lower than they otherwise would be if less efficient markets prevailed.[3]

The relationship between Fannie Mae, Freddie Mac and the Federal Government has been an essential element in the success of these entities. Thus, any discussion of the Federal Government's potential liability stemming from those links must be viewed in the context of the broader issue of housing affordability. The essence of the question before this Subcommittee is whether an appropriate balance currently exists between the public benefit of enhanced housing affordability and the governmental desire for minimization of risk. Given the current capitalization levels, portfolio distributions and managerial expertise present at both Fannie Mae and Freddie Mac, I submit that, under reasonably foreseeable economic scenarios, the current balance is appropriate.

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[1] During the first half of 1989, Chemical originated $1.25 billion of residential mortgages placing it among the 25 largest mortgage originators in the U.S., according to an independent study by SMR Research. In recent years Chemical has increasingly emphasized mortgage securitization as a key component of its overall business strategy. Chemical's participation in the mortgage business has brought it into contact with several GSEs. For example, Chemical regularly swaps large volumes of mortgage product into Fannie Mae mortgage backed securities. Chemical has also worked with Fannie Mae to bring to market the first sale of securities backed by individual cooperative apartment unit loans and the first megapool structure using adjustable rate mortgages. In February 1989, Chemical became the first commercial bank to sole manage a $300 million issue of Fannie Mae securities using the "REMIC CMO" structure.

[2] Commercial banks' share of originations rose to 38% of June's $29 billion of new mortgages, while S&Ls handled 35%, according to the Department of Housing and Urban Development.

[3] Downs, A., The Revolution in Real Estate Finance, Brookings Institution, Washington, DC, 1985.

In recent months some Members of Congress have raised concerns about the financial condition of Fannie Mae and Freddie Mac. A variety of issues have been raised, however, I will focus on the two that I consider most important: appropriate capitalization standards and adequate levels of government regulation.

II. ANALYTICAL FRAMEWORK

In order to analyze these two issues it is useful to rely upon a general framework that isolates the essential elements of risk in mortgage loans: credit risk and prepayment risk.

A. Credit Risk

With respect to credit risk, both Fannie Mae and Freddie Mac guarantee the payment of principal and interest on the mortgage backed securities they issue.[4] In the event of defaults on the underlying loans, both entities ultimately absorb all credit risk represented by the underlying loans.[5]

The main defense against credit risk involves prudent underwriting and geographic diversity. In some cases the GSEs have additional protection in the form of recourse to the lender who initially delivered the underlying mortgages. In other cases, the GSEs have additional protection in the form of first loss coverage by a mortgage insurance company. However, these protections are considered secondary to the basic protections afforded by the related property.

Residential loans historically have performed very well in comparison to other fixed income investments and are considered to be among the most risk-free assets held in the portfolios of financial institutions. Fannie Mae and Freddie Mac both exercise a high level of diligence and safety in their approach to underwriting. In addition, they have the added protection of a geographically diverse risk profile. As a result, their exposure to credit risk appears to have been managed in a conservative manner. Within this context, it is important to note that their delinquency ratios tend to be well below the national average for residential loans. Therefore, they are on the conservative end of the spectrum in a form of asset that already is considered to be relatively low risk in nature.

B. Prepayment Risk

Fannie Mae and, to a lesser extent, Freddie Mac, own sizeable portfolios of mortgage loans.[6] In addition to absorbing credit risk on these loans, the risk that mortgage prepayments will not match the corresponding funding also may result in losses. This is known as prepayment risk.

The main defense against prepayment risk involves active management of both sides of the balance sheet to maintain a close duration match between assets (i.e. the mortgages) and liabilities (i.e. the funding). By utilizing this discipline, an entity can substantially immunize itself from losses resulting from the negative effects of rate volatility.

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[4] Fannie Mae guarantees full and timely payment of principal and interest on all of the mortgage backed securities it issues. Freddie Mac guarantees timely payment of interest and eventual payment of principal on Freddie Mac PCs and Freddie Mac swaps. It guarantees timely payment of principal and interest on certain series of Freddie Mac swaps.

[5] In the case of non-payment by a borrower, Fannie Mae and Freddie Mac ultimately assume full responsibility for the repayment of the outstanding principal balance of a mortgage loan. In the case of loans purchased by either entity without recourse, they are responsible for "making up" the difference between the sale of a property at auction and the principal balance outstanding. In the case of a loan purchase with recourse to the servicer, the servicer is responsible for making up the difference. However, in the event of inability of the servicer to make up the difference the responsibility reverts to Fannie Mae or Freddie Mac.

[6] At the end of 1989, Fannie Mae held over $100 billion of residential mortgages in portfolio, while Freddie Mac at the end of September 1989, held about $20 billion.

Based on their results of operations, it appears that Fannie Mae and Freddie Mac have successfully managed their portfolios to closely match the duration of their assets and liabilities. [7] The market reception for their stocks, particularly in the case of Fannie Mae, has clearly recognized this and exhibits a strong level of confidence in their ability to continue this function.

III. CAPITAL

Both the Department of Treasury and the General Accounting Office are conducting detailed studies of the GSEs that will surely address the question of adequate capitalization levels. The results of these studies should provide valuable insight into an actual amount of capital that is prudent. Therefore, pending the results of those studies, it would be premature to suggest any particular capital level. However, one factor should be emphasized in this regard. The average loan-to-value ("LTV") ratio of both the Fannie Mae and Freddie Mac portfolios and outstanding mortgage securities currently stands below 60%. Clearly, a geographically diverse portfolio of loans at these low LTV levels should be considered low risk assets which reflect the presence of a conservative management philosophy.

One concern raised is whether or not the GSEs present a risk of loss similar to that recently experienced by the thrift industry. Of course, while this is highly unlikely, it is possible that a series of economic events could occur that would result in sustained losses for Fannie Mae and Freddie Mac. The rating agencies perform such "stress tests" to evaluate and rate many types of entities. In this regard, it should be noted that an extended "depression-era" scenario posed in these stress tests is very unlikely and even if it were to occur, both Fannie Mae and Freddie Mac would have substantial staying power.

The depth of potential losses must also be examined and compared to the thrift example. The Resolution Trust Company ("RTC") has only begun its task of absorbing all the insolvent thrifts that will ultimately come under its control. Even though the exact magnitude of the losses is subject to speculation, most experts agree that the losses will be dominated by: a) non-residential loans concentrated in the oil dependent states, b) commercial business loans, c) commercial office building loans, d) acquisition development and construction loans, e) loans on raw land, and f) speculative investments, including junk bonds. Conspicuously absent from this list are the single-family owner occupied residential loans that represent the basic business of Fannie Mae and Freddie Mac. In addition, many of the insolvent thrifts were regionally dependent institutions with real estate loan portfolios suffering from geographic concentration. Over and above these distinctions is the fact that the Fannie Mae and Freddie Mac portfolios consist of loans with low average LTV ratios that also have the benefit of wide geographic diversity.

As a result, it seems reasonable to expect that neither Fannie Mae nor Freddie Mac will sustain such losses as to threaten insolvency, given their current operations and current economic conditions. In fact, many analysts believe that their prospects for continued growth and profitability are extremely good. Due to their conservative asset profile, even if there were a prolonged severe downturn in the economy, these institutions would endure. Finally, if the downturn was such that it truly threatened insolvency, it would be difficult to project that losses incurred would ever approach the magnitude of losses experienced by the thrift industry because of the factors I have discussed: low LTV ratios, wide geographic diversity and solid management of credit and prepayment risk.

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[7] The problem of duration matching is most significant in the context of a portfolio of assets that is owned and funded. With regard to the portion of the GSEs' business related to mortgage backed securities, their function is similar to that of an insurer rather than a portfolio manager, thus, duration matching is a less significant issue.

A. One Standard GSE Capital Rule

Responding to concerns over capital, some have suggested that a standard capital rule should be applied to all GSEs. Given the diversity of the businesses that the GSEs engage in it would appear difficult if not impossible to draft an all encompassing rule that would offer an insightful level of protection to the Federal Government. Some commentators have recognized that Fannie Mae and Freddie Mac are distinct from the other GSEs and have gone on to suggest that current commercial bank or thrift capital regulations should simply be applied to these two GSEs. For the same reasons that a single rule for all GSEs would be ill-advised, I believe that the application of a set of rules designed for companies with substantially different lines of business also would be inappropriate.

Banks and thrifts are permitted to own commercial real estate loans, business loans, corporate securities, etc. Fannie Mae and Freddie Mac are limited to the residential mortgage business. This limitation significantly alters their risk profile when compared to banks and thrifts. As a result, rules that are not tailored to reflect this distinction will not offer an insightful level of regulation or protection.

With respect to credit risk, bank and thrift capital rules adopt a relatively simplistic strategy. For example, unsecuritized mortgages are assigned to the 50% bracket provided, among other things, that their LTV ratios are at or below 80% and they are assigned to the 100% bracket if the LTV exceeds 80%. From a credit perspective, there is a significant difference between a loan at 81% LTV and one at 95% just as there is a significant difference between a loan at 80% LTV and one at 60%. However, the current bank and thrift capital regulations recognize no such distinctions. While these relatively broad categorizations enhance the ability to administer a rule to many institutions, in the case of Fannie Mae and Freddie Mac, rules should reflect much greater detail and insight into the true credit risks of mortgage loans.

With respect to prepayment risk, both the bank and thrift regulators have recognized the substantive importance of this risk and the corresponding need for rules that apply differing standards to institutions with differing duration mismatches. Unfortunately, this is an extremely complicated and technical area that is not easily administered to thousands of institutions but can, in a practical manner, be administered to just two companies.

As a result, if revisions to current capital standards are deemed necessary, it is recommended that such rules be tailored specifically to the lines of business undertaken by Fannie Mae and Freddie Mac. It is essential that any such revision be crafted to reflect a detailed understanding of the nature and extent of credit risks represented by all salient characteristics of residential mortgage loans as well as the effect of interaction between these characteristics. Any such revision should also encompass the quantitative analysis techniques undertaken in portfolio risk management and the sophisticated hedging vehicles employed to minimize the risk. While such a rule would present a drafting and administrative challenge, anything less sophisticated would do a disservice to all concerned.

IV. GOVERNMENT SUPERVISION

As a former staff attorney at the SEC, I am sensitive to the need for adequate federal supervision. In addition, as a senior officer of a regulated entity, I also appreciate the desire to have such regulation achieve public policy goals with the least amount of intrusion into business operations. Whether or not the appropriate balance between these competing demands has been achieved with respect to Fannie Mae and Freddie Mac remains to be seen. In this regard, the following issues, among others, should be considered.

A. Shift of Risk from Thrifts

The first issue regards the potential shift of risk from the thrift industry to the GSEs and the perceived necessity to regulate against this risk. Concerns have been raised to the effect that the Financial Institutions Reform, Recovery and Enforcement Act ("FIRREA") will result in substantial sales of thrift assets to the GSEs thereby causing a shift of risk from the thrift industry to the GSEs.

While FIRREA has already resulted in substantial sales of assets to the GSEs, it does not necessarily follow that the GSEs will assume risks that could cause another financial crisis. The GSEs will not, we must assume, either alter their credit standards or offer rates on securities that are not reflective of the current market. In effect, the credit and mark-to-market losses for insolvent thrifts will be centralized at the RTC and will not be passed on to the GSEs. As a result, unless the GSEs alter their standards for failed thrift assets, there is no reason to believe that there is a looming crisis in the process of being shifted from the thrift industry to Fannie Mae and Freddie Mac.

B. Market Discipline

The second issue regards the suggestion that federal regulation must be put in place to compensate for a lack of adequate market discipline. Certain commentators believe that investors ignore the business risks attendant to GSEs, relying on the premise that an implied federal guarantee will provide them with full protection against loss.[8] For purposes of this discussion, it is assumed that "market discipline" entails the public disclosure of information and a reaction in the form of a change in the price of the subject company's securities.

With regard to equity securities, Fannie Mae and Freddie Mac have thousands of shareholders, their securities are actively traded and the results of their operations are closely followed by Wall Street analysts.[9] There is no apparent reason to suggest that shareholders are relying on federal protection against loss inasmuch as these securities trade actively and prices appear to be responsive to normal market information flows and trading conditions. More importantly, there is no apparent reason to suggest that the experience of the thrift industry should provide any comfort to these shareholders.

Historically, the thrift industry predominantly consisted of mutually-held institutions. As a result, market discipline from the private sector could not be applied to those entities. During the 1980s, however, a significant number of thrifts converted from mutual to stock form thereby subjecting themselves to active market review. In general, adverse publicity regarding these institutions was publicly disseminated and the markets reacted accordingly. In the event of negative publicity, shareholder ownership positions lost value and in the case of insolvency, shareholders were not afforded loss protection by the FSLIC.[10] As a result, market discipline was applied and shareholders either gained or lost value as would shareholders in any other publicly traded company.

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[8] Others have also raised concerns that purchasers of GSE securities do not have access to the same type of information as is required under SEC regulations for other publicly held corporations. In this regard, though securities offerings by Fannie Mae and Freddie Mac are exempt from the registration requirements of the federal securities laws, the disclosure standards applied to these securities are typically a mirror image of the legal requirements that otherwise would be imposed were they subject to registration.

[9] A recent search of the computer database "Investext", a service which stores investment analysts' reports on publicly held corporations, yielded 28 such reports on Fannie Mae and Freddie Mac during 1989.

[10] Pursuant to applicable bankruptcy regulations, savings and loan stockholders generally were put in the same position as creditors of an insolvent thrift as they would have been had the insolvent entity been any other corporate entity.

While the proponents of regulation to fill the perceived void in market discipline might concede that some level of scrutiny is present in the markets for Fannie Mae and Freddie Mac equity, they could argue that this is not the case with respect to GSE debt. While implied federal support appears to be present in the case of debt, it does not necessarily follow that market discipline is absent. Even if it is believed that the Federal Government would support the debt of the GSEs, there is no guarantee with respect to the terms or timing of such support. As a result, the trading prices for GSE debt securities vary from GSE to GSE.[11] Clearly, relative liquidity is a factor in these differentials but perceived credit risk is also a factor and prices do reflect this consideration.

The insight to be gleaned from the subject of market discipline is that the concepts underlying the securities laws can and have acted as an extremely potent form of effective regulation and those concepts currently are being applied to Fannie Mae and Freddie Mac.

V. CONCLUSION

I agree with the pressing need to exercise diligence in avoiding financial disasters, such as the one we are currently experiencing in the thrift industry. As part of this process, I fully support the Congressional scrutiny being applied to the GSEs and the studies being undertaken by the Department of Treasury and the General Accounting Office. A key component of this examination must be the public benefit Fannie Mae and Freddie Mac provide. Fannie Mae and Freddie Mac have performed a valuable service by creating an effective link between mortgage originators and the capital markets and this service has been provided in a safe and sound manner. The liquidity afforded thereby has assisted in making housing in the United States more affordable for more people. As a result, the need for any additional regulation should be carefully weighed against the practical burdens of such regulation and the ultimate effect on housing in this Country. Thank you for the opportunity to present my views.

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[11] The average secondary market spread of a Fannie Mae bond of approximately a 5 year maturity to the equivalent weighted average life Treasury bond was 41 basis points during the last half of 1989. The average spread of similar maturity Freddie Mac bonds was 65 basis points with the additional spread being due largely to the illiquidity of these bonds.

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SUBCOMMITTEE ON HOUSING AND URBAN AFFAIRS
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

Roundtable Hearing on the Safety and Soundness of
Fannie Mae and Freddie Mac
February 7, 1990

Statement by: Andrew M. Carter, Director
Jennison Associates Capital Corporation
466 Lexington Avenue, New York, NY 10017

I'm pleased to submit this testimony, because I have an interest in and knowledge about today's subject as a Director of Jennison Associates Capital Corporation, which manages stocks and bonds for large tax free accounts. We are a subsidiary of The Prudential Insurance Company of America. We manage over $21 billion for 74 clients, predominantly United States corporate pension funds. I am in charge of our fixed income department, which manages over $13 billion for 25 pension funds. Today we own about $2.4 billion in mortgage-related securities, of which $631 million are in FNMAs and $329 million in FHLMCs. Our commitment to mortgages varies with market conditions, and has been as high as 50% of assets under management, or over $6 billion. I have been investing in mortgage-backed securities throughout my career, ever since I began working with the Harvard Endowment bond portfolio in 1964.

Senator Cranston stated several areas of concern in his invitation to participate in this Roundtable. This response is limited to the concern which Jennison Associates believes is most critical:

1) Federal Liability

The markets clearly believe that FNMA and FHLMC issues, and issues guaranteed by either of them, carry the backing of the general United States government. Although these securities state on their face that they are not backed by the full faith and credit of the government, they are referred to everywhere as "United States Agency" issues. The debt of both FNMA and FHLMC can be used by the banking system as primary reserves and can be discounted at the Federal Reserve banks. They are not subject to SEC registration laws. Their debentures trade at yields close to U.S. Treasuries. The credit markets believe, and reasonably so in our opinion, that the United States government will either make good on the obligations and guarantees of both FNMA and FHLMC or will see to it that both organizations are managed in a sound manner.

Borrowing short and lending long resulted in asset-liability mismatches which, combined with record high interest rates and bond market volatility, have in the past produced multi-billion dollar negative net worths for FNMA and FHLMC, when both assets and liabilities were taken at market value. That risk has been substantially cured by both organizations, and mismatches should not be permitted to develop in the future. Even without such mismatches, should the housing market suffer meaningful price declines, losses on underlying mortgages - both in portfolio and guaranteed - could result in operating losses for FNMA and FHLMC. The equity capital of both is less than 1% of total liabilities, and the major rating agencies have recently expressed the opinion that they would not receive AAA ratings were there not a strong implicit government guarantee of their obligations. Specific details of capital adequacy and operating procedures are quite secondary as long as the government guarantee is, and is perceived to be, in place.

The financial markets have been, and probably will continue to be, highly volatile. These institutions have on balance been stablizing forces in the mortgage markets. The pending disgorgement of product from failed and troubled thrifts may be difficult for the private markets to ingest entirely on their own, and it may be appropriate for FNMA and FHLMC to take a significant role in that process. However, any intimation that the government may back away from its implied guarantee of FNMA and FHLMC obligations could result in a general financial crisis. The value of FNMA and FHLMC issues in the marketplace is massive. The other federal agency securities are also perceived as carrying the implied guarantee of the government. Federal Home Loan, Farm Credit, FICO, and Resolution Trust are salient examples. Should domestic and world financial markets develop even a hint of doubt that these issues will in fact be backed by the United States Government, the result might well be a selling panic and loss of confidence which could reverberate throughout the world financial system. This could result in massively higher interest costs on all federal obligations.

Background Paper Prepared for the
Senate Committee on Banking, Housing,
and Urban Affairs
Subcommittee on Housing
February 7, 1990

This background paper has been prepared for the Subcommittee on Housing by members of the Debt Rating Group of Standard & Poor's Corporation. You have asked us to discuss the risk factors involved in the credit quality of private sector companies which have comparable characteristics to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Secondly, you have asked us to highlight the differences between Fannie Mae and Freddie Mac and these private sector companies.

The two industries we will discuss will be the mortgage insurance industry and the portfolio lending side of the thrift industry. While Freddie Mac's organization and structure is most like a private mortgage insurer, Fannie Mae has two business lines: the largest of the two, mortgage backed securities (MBS), resembles a mortgage insurer and the smaller side of Fannie Mae's business resembles a portfolio lender. Both business lines involve taking on asset risk. However, portfolio lending involves taking on interest rate and funding risk since the holder of the mortgage must finance its holdings.

Standard & Poor's ratings provide our opinion of the credit worthiness of the debt being issued and the willingness and ability of the company to provide timely payment of principal and interest to the investor. It is important to point out that numerous factors go in to our evaluation. Certain factors for each industry may be weighed differently in our analysis and you will see this in the discussion below.

Analysis Relating to Freddie Mac and Fannie Mae MBS

We will discuss the rating methodology for companies in the mortgage insurance industry first. Virtually all of Freddie Mac's business and about two-thirds of Fannie Mae's business is most similar to the mortgage insurance industry. The issuing of PC and MBS guarantees is similar to the insurance provided by private mortgage insurers. Standard & Poor's looks at six major factors in a review of mortgage insurers:

*Industry risk and market strategy
*Management
*Asset quality (Business Review)
*Operational performance
*Capitalization
*Liquidity/Financial flexibility

The industry risk analysis reviews the forces driving industry competition and competitive strategies. An overall industry outlook is formed, incorporating such elements as demand, marketshare and cost structures. Capital requirements are also examined, and an assesment is made as to an appropriate return on capital and the ability of companies to attain and sustain an appropriate return. Competitive strategies are also examined, with business activities designed to gain marketshare viewed negatively. Fannie Mae and Freddie Mac have virtually no competition except each other, but it would be important to analyze the business strategies of each including market share, product, loan type and pricing projections.

Assessment of the company's management has significant impact on the rating eventually assigned. Important elements of this analysis include the experience, background and tenure of senior management at the company as well as the organizational structure and depth of management. Financial and operational strategies are reviewed, as is evidence of an ability to implement strategies successfully. This factor would be fully analyzed for Freddie Mac and Fannie Mae.

Asset quality is primarily a function of the insurers underwriting guidelines. The business review component of the rating process examines the asset quality of the insurer's off balance sheet "mortgage portfolio" in the areas of concentrations of risk by location, product type, loan feature and year of origination. Additionally, book of business performance in terms of delinquency and claim results are reviewed by product type, loan feature, geographic location and year of origination. This review can oftentimes identify underwriting inconsistencies and/or pricing deficiencies.

It would be appropriate to evaluate both Freddie Mac and the MBS side of Fannie Mae in this area. As is the case for mortgage insurers, questionable product development or excessive geographic concentrations disclosed by the business review analysis could warrant adjustments to capital adequacy assumptions.

Operating performance capitalization (capital adequacy) are viewed as the most important components of the mortgage insurer rating process. In order to be able to attract new capital, returns to investors must ultimately be commensurate with the risks posed by a monoline financial guaranty product line. Earnings, dividends and surplus growth track records are considered. A company's underwriting profitability is reviewed and measured by its loss, expense and combined ratios. Reserve adequacy is assessed by reviewing a company's reserving methodology and its relative conservativeness. Investment activities are evaluated in terms of performance, risk profile, and contribution to total operating results. Standard profitability measurements such as return on assets and return on equity are reviewed on a historical and prospective basis.

Mortgage insurance companies, given their monoline nature and strong correlation with housing and economic cycles, are potentially subject to catastrophic loss. For a 'AAA' assessment, capitalization must be sufficient to withstand a capital stress test based on the 1929 depression. While the "stress test" which Standard & Poor's developed for the mortgage insurance industry would not be appropriate for Fannie Mae or Freddie Mac, capital should be measured against an adjusted stress test for each. The most important adjustment would recognize a lesser foreclosure frequency and loss severity for the Freddie Mac and Fannie Mae's MBS, which benefit from first loss coverage provided (for loans with loan to value ratios in excess of 80%) by the private mortgage insurance companies.

Given potential catastrophic losses, and resulting cash requirements to pay large amounts of claims in short periods of time, a company's liquidity and its ability to sell or redeploy assets, borrow, or issue stock is examined under normal and adverse scenarios.

Freddie Mac and Fannie Mae each have an authorized $2.25 billion "line of credit" to the Treasury. While this can be taken into consideration in this element of analysis, the "line of credit" is discretionary. Thus, we would not give full credit to this support.

The factors discussed above would be applied to all of Freddie Mac's business and to the MBS side of Fannie Mae's business. Unlike Freddie Mac, Fannie Mae also holds a sizeable portfolio of loans. To evaluate this side of the business it would be appropriate to use the portfolio analysis for the thrift industry. While some of the factors such as assessment of management and underwriting guidelines apply to all areas of the business, holding a portfolio of loans creates separate risks. Because Fannie Mae issues corporate debt to fund the purchase of its loans held in portfolio, interest rate risk management is an important element of analysis for Fannie Mae. In addition there are factors analyzed for thrifts which would not be appropriate for Fannie Mae. The most obvious one is the depository role of the thrift. In addition, thrift analysis includes an evaluation of any commercial and consumer lending activity which would not be present at Fannie Mae.

Analysis Relating to Fannie Mae's Portfolio Business

Major factors which are evaluated in the analysis of the portfolio lending aspects of a thrift are:

*Management
*Industry risk and market position
*Operational performance
*Asset quality
*Accounting
*Capitalization
*Interest rate management

Evaluation of management would be essentially the same for a portfolio lender as a private mortgage insurer. Depth and experience, financing policies, and a comparative review of operational results would be reviewed.

Our view industry risk for a portfolio lender as high. The combination of asset, interest rate and funding factors provides a high risk environment. While single family mortgages tend to be low risk in and of themselves, they are long term assets. This long term nature of mortgages combined with the attractiveness of short term funding (assuring an upward yield curve) could lead portfolio lenders to carry a mismatch between the maturities of assets and liabilities, thus exposing the portfolio lender to interest rate risk. This are needs careful analysis and monitoring. Market position evaluates the strength that a company has within its industry. Fannie Mae has little competition in its guarantee MBS business, but substantial competition in its portfolio business. In the portfolio business, however, its favorable cost of funds gives Fannie Mae a strong advantage.

The most comprehensive measure of financial or operational performance is return on assets. Included in this analysis is both amount and quality of reported earnings. Net interest income is the most important source of quality earnings which depends primarily on the volume and type of earning assets or loans being held in the portfolio. The higher the assets in quality the less the spread or earnings. Conversely the lower the quality the higher the spread. A portfolio solely made up of fixed rate single family mortgages is likely to yield less than a portfolio of adjustable rate single family mortgages and multi-family mortgages and provide less in earnings. Standard & Poor's takes into consideration the thrift's provision for loan losses as well. The greater the amount of credit risk, the larger the provision will be. Operating expense must be analyzed also. The ability to control expense can be a good indicator of management's overall competence. This also shows how these factors interrelate with each other and the importance of mangement in the analysis. While these are only some of the factors reviewed in the financial performance of a thrift, they are the ones that would be most important to evaluate for Fannie Mae's portfolio.

The credit quality of a thrift is largely dependent on the diversity and quality of its portfolio of earning assets. Fixed rate single family mortgage loans have historically been low risk investments. As with mortgage insurers Standard & Poor's pays careful attention to the underwriting guidelines and the track record of the portfolio lender. The portfolio's proportion and inclusion of adjustable rate mortgages, negative amortization loans, and jumbo loans can mean riskier assets. We feel that higher risk assets must be supported by an appropriate level of profitability and adequate capitalization and reserves.

Accounting quality is traditionally analyzed in thrift evaluations. Important factors in this area have historically been use of GAAP or RAP accounting principles, recognition of fee income, impact of accounting for mergers and acquisitions These concerns do not apply to Fannie Mae. However, the current discussion of mark to market accounting for assets has implications for Fannie Mae. A rise in interest rates, for example, would lead to a depreciation in the market value of Fannie Mae's portfolio of mortgages. If Fannie Mae were required to mark its portfolio to market, it would have to set any decline off against its capital.

For a portfolio lender capitalization should be at a level to provide comfort to cover the risk of the portfolio. Standard & Poor's believes that a risk adjusted approach to capital adequacy for a portfolio lender conveys the best sense of financial strength. Thus, the asset quality is the most important factor in the evaluation of capital needed for a portfolio lender. Because of Fannie Mae's two business lines, the capital needed for the portfolio would be in addition to the capital needed to support the MBS side of Fannie Mae's business.

It is important to review the methods used by mangement in evaluating interest rate risk. This factor could be included in the mangement section, but we highlight it here because it is the major factor which is not an essential element of evaluation in the MBS side of Fannie Mae's business nor in

Freddie Mac. The use of short term debt to finance long term assets such as mortgages can leave the portfolio lender open to interest rate risk. As interest rates rise, interest expense would rise more rapidly than interest income and the net interest margin would be squeezed. From a credit perspective, a matched position in which the maturities of assets and liabilities are similar is best.

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February 27, 1990

The Honorable Donald W. Riegle, Jr.
105 Dirksen Senate Office Building
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Washington, D.C. 20510

Dear Senator Riegle:

I appreciated the opportunity to participate in the roundtable hearing on the secondary mortgage market which the Senate Subcommittee on Housing and Urban Affairs held on February 7, 1990.

The focus of the hearing was the financial soundness and capital adequacy of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. An issue the Subcommittee wished to discuss was the risk created for the Federal Government by the activities of the secondary mortgage market. The discussion touched on appropriate capital standards and increased oversight. Controls, such as capital standards and oversight, are very important elements in controlling risk. However, any system of controls can be circumvented by management. Therefore, the most important consideration in evaluating risk is an evaluation of management.

Organizations must assume risks to achieve their goals and objectives. Management must decide which risks to assume and then control these risks. If management of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation control the risks within their organizations, the risk to the Federal Government is greatly reduced.

As I pointed out in my original statement, REMIC's (Real Estate Mortgage Investment Conduit) issued by the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are preferred to privately issued REMIC's. This is due, in part, to the market perception of the quality of management of each organization. The market believes management does an effective job of monitoring and controlling the risks assumed by the organization.

Management's philosophy and operating style have significant influence on the control environment with the entity. It impacts attitudes about acceptable business practices, codes of conduct, lines of authority, and delegation of responsibilities. The business community believes both these organizations have strong management that exerts positive influence on the structures of the organizations.

Page 2

Often during the roundtable discussion, an analogy was made between the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and the savings and loan industry. When discussing management and management's philosophy, the analogy may not be appropriate. Many of the problems in the savings and loan industry were caused by weak or reckless management who disregarded prudent policies. Management was unable, or unwilling, to properly assess and control the risks inherent in their businesses.

This is not the market's impression of the situation at the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation. I suggest that future discussions of the risks posed by these entities focus, in part, on management and their philosophy about assuming and controlling risk within the organization.

Thank you for the opportunity to add these remarks to the record.

Very truly yours,

John C. Sites
Senior Managing Director

JCS/pc

CITY MORTGAGE
CORPORATION

JAMES M. CRAWFORD
PRESIDENT & CHAIRMAN OF THE BOARD

February 16, 1990

Senator Alan Cranston, Chairman
Senator Alfonse D'Amato, Ranking Member
Subcommittee on Housing & Urban Affairs
United States Senate
Washington, D.C. 20510

Dear Senator Cranston
and Senator D'Amato:

At the suggestion of Senator Ted Stevens, I am enclosing testimony in conjunction with the hearings held by the Subcommittee on Housing & Urban Affairs of the Banking, Housing & Urban Affairs Committee on February 7, 1990. The testimony addresses a practice of geographical discrimination which has had serious impact on the availability of housing funds in Alaska. I hope the Committee will seriously consider the testimony.

With best wishes,

JM Crawford

James M. Crawford

JMC:mlg
encl

P.O. BOX 92810 • ANCHORAGE, ALASKA 99509-2810 • (907) 563-0700 • FAX 562-0889

Testimony of James M. Crawford,
City Mortgage Corporation,
Before the Subcommittee on Housing & Urban Affairs
of the Banking, Housing & Urban Affairs Committee
of the United States Senate

I appreciate the opportunity to provide testimony to the Committee as it considers the secondary mortgage market. I am the President and Chief Executive Officer of City Mortgage Corporation, a mortgage origination and servicing company serving the State of Alaska. I am also a former Chairman of the Legislative Affairs Committee of the Alaska Mortgage Bankers Association. My testimony today is on behalf of City Mortgage Corporation.

City Mortgage Corporation is a small independent mortgage company which originates mortgage loans to provide housing for residents of the State of Alaska. When a family seeks to obtain a mortgage from us we determine if they are eligible for one of the mortgage products presently available. We process their application and attempt to obtain a commitment from a secondary mortgage market to purchase their mortgage upon closing. We do not have the capital to underwrite the mortgages that we originate. In this situation City Mortgage is similar to a number of other independent mortgage companies around the country who depend on the secondary mortgage market as a principal source of capital to meet local housing needs. Therefore I am very familiar with the secondary mortgage markets and how those markets serve the needs of home buyers.

The availability of ample, competitive secondary markets to purchase loans we originate is crucial to our business. However, our situation is not unique. A number of larger institutions that may have the capital to hold loans frequently sell mortgages that they originate into the secondary market in an effort to avoid the expense of continued mortgage loan servicing or to free up capital for other purposes.

Over the years the federally-chartered entities, The Government National Mortgage Association (GNMA), the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) which supervise and coordinate the secondary markets have been very effective at distributing mortgage capital across the country. Obviously, competition in the secondary mortgage markets affects the price of products we can offer our customers. With increased competition rates and charges decrease. Customers can then pay higher prices for housing helping to stabilize housing prices.

GNMA, FNMA and FHLMC enjoy a unique status. FNMA and FHLMC are federally chartered corporations. All three entities are exempt from taxation. GNMA, of course, is an agency of the federal government and has the ability to issue loan guarantees which are backed by the full faith and credit of the United States.

These agencies enjoy this unique relationship because of the purposes they were to accomplish. GNMA and FNMA were intended to:

> "Provide supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing", 12 U.S.C. 1716(a) and to "provide special assistance. . . for the financing of (1) selected types of home mortgages originated under special housing programs. . . for segments of the national population which are unable to obtain adequate housing under established home financing programs, and (2) home mortgages generally as a means of retarding or stopping any decline in mortgage lending and home building activities which threatens materially the stability of a high level national economy." 12 U.S.C. 1716(b).

They do so by establishing standards for loans which are eligible to be pooled into various types of mortgage-backed securities. Secondary mortgage markets issue securities backed by eligible loans. Investors purchase the securities, thereby providing the capital for mortgage loans.

Unfortunately, the Congressionally mandated purposes are being frustrated. A significant number of mortgage-backed securities issuers have arbitrarily and unreasonably discriminated against significant portions of the housing market. This has reduced the availability of capital and competition among secondary markets, increased prices and harmed affected real estate markets. Those areas in need of investment capital for home mortgage financing are being deprived of it by this discrimation.

In the last few years it has been increasingly difficult for mortgage originators in Alaska to locate secondary mortgage market firms which will purchase our mortgages. My firm has contacted well over 100 companies which purport to buy mortgages nationwide but which refuse to buy loans from Alaska. By way of example, in December when I was in Washington, I looked through the Washington, D.C. Yellow Pages under mortgages. Four firms advertised national lending programs. Ahmanson Mortgage Company claimed to be "The nation's mortgage lender." 1989-90 Washington, D.C. Yellow Pages at 1193. Fairland Mortgage Co. advertised, "We purchase mortgages nationwide." Id. at 1193. Nationwide Lending Group's name says it all, id. at 1191, and Segal Mortgage Company advertises, "We buy mortgages nationwide." Subsequently, we have contacted each of these companies and offered to sell mortgages. All stated they would not buy mortgage loans in Alaska.

The attachments show further that repeated efforts to locate markets to purchase our loans have been frustrated. See Exhibit A. It must be noted that we are offering to sell FHA loans which are 100% insured by the U.S. Government. The loans meet all the requirements established by GNMA, FNMA or FHLMC.

Those markets have made a unilateral decision not to purchase loans from Alaska. As a result, we in Alaska are the victims of blatant discrimination. This discrimination deprives Alaskans of the benefits of the nationwide flow of capital that was intended at the creation of these programs.

This problem has become severe enough that the Alaska Mortgage Bankers Association has passed a resolution seeking correction. See attached Exhibit B. The Association consists of all segments of the mortgage origination business in Alaska, including large commercial banks, smaller financial institutions, and independent mortgage bankers.

It is true that the decline in oil prices in 1985 and the resulting economic slump in Alaska has increased the number of nonperforming loans. But the vast majority of Alaskans are not delinquent in their mortgage loans. New loans from Alaska are performing well. Individual borrowers may be having some difficulties but generally the Alaskan housing market is an appropriate place to invest. Many secondary mortgage buyers have written Alaska off, apparently based on rumor or speculation. They have apparently decided that it is not wise to purchase loans from Alaska.

This practice has had the same effect that the now-prohibited practice of "redlining" had on the availability of mortgage lending in parts of American cities. Mortgage loans are unavailable or available only at higher prices. Housing prices remain depressed by the higher mortgage rates. Fewer people qualify for the higher rates. The federal government has recognized that discrimination on the basis of location is inappropriate in the context of "redlining." The regulations of the Federal Home Loan Bank Board specify that, "These restrictions are intended to prohibit use of unfounded or unsubstantiated assumptions regarding the effect upon loan risk of the . . .physical or economic characteristics of an area." 12 C.F.R. 531.8(c)(7).

Alaska is a relatively small housing market with a population estimated to be slightly in excess of 500,000. Alaska has far fewer people than many of the neighborhoods in urban areas to which anti-redlining prohibitions apply. Of course, Alaska's 500,000 people are spread over a much larger area. They nonetheless are entitled to the same protection against geographical discrimination as the residents of large cities.

A home buyer in California, New York, Florida or the other states not subject to this discrimination will deal with a mortgage originator who has the ability to sell to dozens if not hundreds of potential secondary mortgage buyers. Alaskans have many fewer options.

It is not our intention that companies which serve a relatively discrete area of the nation should be compelled to purchase mortgages far from their business operations. But those who purport to be country wide or to serve home buyers nationwide must serve all of the states without arbitrary discrimination.

Our dispute is not with the management of GNMA, FNMA or FHLMC. They have generally served the needs of America's home buyers well. These agencies have frequently, through special arrangements, provided assistance to Alskans seeking to purchase homes. But they have fallen short in preventing those who issue mortgage-backed securities from discriminating against discrete states or regions. Alaskans do not desire that poor quality loans be placed into the market. What we ask is that the criteria employed to determine qualified loans be applied across the United States so that a home buyer in Alaska has the same opportunity to compete for mortgage financing as a home buyer in the rest of the country. Alaskans should not be systematically and arbitrarily excluded from eligibility for mortgages. The present system which allows such discrimination is as unfair as a system which allows such discrimination in Watts or Bedford-Styvesant or Liberty City.

I understand that similar problems are experienced by mortgage originators in other states such as Wyoming, Oklahoma, Arizona and Louisiana where the energy depression has adversely affected local economies. If so, the problem is more widespread than simply Alaska.

The bottom line is very simple. Those who enjoy the benefits of participating in the mortgage-backed securities market and who purport to participate in that market on a nationwide basis should be required to consider loans on the basis of the buyer and the property, not on an unfair preconceived discriminatory opinion of the geographic location of the properties. I request that the Committee adopt legislation which would prohibit GNMA, FNMA and FHLMC from the guaranteeing and/or authorizing the issuance of mortgage-backed securities by issuers who engage in unfair, arbitrary geographic discrimination.

Thank you.

Enclosure
7355c

ALASKA MORTGAGE BANKERS ASSOCIATION
P O BOX 9-2691 / ANCHORAGE, ALASKA 99509-2691

RESOLUTION
OF THE MEMBERSHIP
OF THE ALASKA MORTGAGE BANKERS ASSOCIATION

...and upon motion duly made, seconded and unanimously passed, the following resolution was adopted:

WHEREAS Alaska Mortgage Bankers Association member firms have difficulty attracting secondary markets to our state.

WHEREAS some national mortgage bankers will not purchase FHA or VA loans because they are originated in Alaska.

WHEREAS some mortgage insurers will not issue mortgage insurance policies because they are originated in Alaska.

WHEREAS Alaskans are experiencing a diminished capacity to participate in national funding programs and believe that Alaska is being redlined.

WHEREAS a charter goal of the national mortgage associations, the Federal National Mortgage Association and Government National Mortgage Association is to assist the secondary mortgage market and whereas the Federal Home Loan Mortgage Corporation was created to spur the development of the conventional secondary market.

BE IT RESOLVED that the Alaska Mortgage Bankers Association supports action by the Alaska Congressional Delegation which would amend Fannie Mae, Ginnie Mae and Freddie Mac enabling statutes to clarify that discrimination based on location is in fact a specific violation.

The foregoing is a true and correct copy of a resolution adopted at a meeting of the membership of the Alaska Mortgage Bankers Association, duly called and held on March 16, 1989.

James
President
Alaska Mortgage Bankers Association

Secretary/Treasurer
Alaska Mortgage Bankers Association

SUBSCRIBED AND SWORN to before me this 17th day of March, 1989.

Deborah K.
Notary Public in and for the State of Alaska
Notary Expires 10-21-90

Response of John J. Kriz, Vice President, Moody's Investors Service, New York City, to question posed by Sen. Donald W. Riegle, Jr. of the Committee on Banking, U.S. Senate, dated February 7, 1990.

Question: Do you substantially agree with the analysis of Standard & Poor's that the risk level to the government of these agencies is at minimum investment grade?

Answer: Yes, the ratings of the senior debt of Fannie Mae and Freddie Mac, were they to base completely their stand-alone status, would be at least investment grade (i.e., rated Baa3 or higher.) However, several relevant points should be noted:

- GSE status, in and of itself, can decrease the likelihood of GSE default and potential U.S. Government loss. This could occur because of the general confidence GSE status lends to a GSE. Thus, a stress situation that could bankrupt a non-GSE, may not bankrupt a GSE because the public could retain confidence in the GSE's creditworthiness, giving it an opportunity to (perhaps) recover its economic health.

- Determining a credit rating for a GSE stripped of its GSE status is something akin to trying to prove a negative proposition. Withdrawal of GSE status would result in potentially significant changes in the GSE's market environment and cost of funds, resulting in major alterations in the GSE's financial position and business strategy. Thus, a rating on a GSE stripped of its GSE status would be a rating on an entity that does not now exist.

For additional information on Moody's approach to GSE credit ratings, our actual ratings of GSE debt, and our detailed analyses of Fannie Mae, Freddie Mac and other major GSEs, please refer to Moody's testimony on 7 February 1990 before the Senate Committee on Banking, Housing and Urban Affairs. I would be happy to respond to further questions from the Committee.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
THE UNDER SECRETARY
WASHINGTON, D.C. 20410

March 6, 1990

Honorable Donald W. Riegle, Jr.
Chairman
Committee on Banking, Housing, and
Urban Affairs
United States Senate
Washington, DC 20510-6075

Dear Senator Riegle:

It was a pleasure to testify before the Committee on Banking, Housing, and Urban Affairs on the safety and soundness of Fannie Mae and Freddie Mac.

I submit the enclosed answers in response to the questions enclosed in your letter of February 15, 1990.

You have my best wishes.

Sincerely yours,

Al Delli Bov

Alfred A. DelliBovi

Enclosure

Questions on Fannie Mae and Freddie Mac

Q.1 What kind of resources in terms of funds and personnel does HUD plan to devote to reviewing the safety and soundness of Fannie Mae and Freddie Mac?

A. In September 1989, Secretary Kemp created within HUD a Regulatory Review Board to advise him on carrying out his regulatory responsibilities for Fannie Mae and Freddie Mac. The Review Board consists of the Under Secretary, the General Counsel, the Assistant Secretary for Housing-FHA Commissioner, the Assistant Secretary for Policy Development and Research, the Assistant Secretary for Community Planning and Development, and the President of the Government National Mortgage Association. The Board collects necessary information on Fannie Mae and Freddie Mac activities, formulates options on regulatory actions, and makes recommendations on actions and decisions. The Review Board is assisted by staff from the Office of General Counsel, the Office of Policy Development and Research, and the Office of Housing. We are currently studying the nature of HUD's past regulatory scheme and our options for a new oversight regime. HUD is prepared to add additional staff to review Fannie Mae and Freddie Mac activities if necessary.

Q.2 Do you think current capital requirements for Fannie Mae and Freddie Mac, which ignore guarantees and count subordinated debt, are properly structured?

A. HUD will follow closely the studies of capital standards by the Government Accounting Office (GAO) and reviews of interest rate, credit, and management risks by the Treasury and provide any assistance GAO and Treasury request. HUD would prefer not to comment on these issues until the first Treasury study has been completed. HUD intends to respond appropriately to any findings which indicate that changes in the nature or amount of capital for Fannie Mae and Freddie Mac are needed to protect the government's interest. HUD will, moreover, inform the Congress of any disagreements HUD has with these studies' findings. In addition, HUD will continue its in-house analyses of agency interest rates and credit risks and appropriate levels of capital in relation to these risks.

Q.3 Does HUD need any changes in law to do its regulatory job properly?

A. HUD does not see the need for any statutory changes at this time.

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February 14, 1990

Dear Don:

One issue raised at the roundtable hearing concerned the similarities of government sponsored enterprises to banks and thrift institutions. Enclosed is an article outlining some of those similarities. I respectfully request that this letter and that article be made a part of the printed hearing record.

The Standard and Poor's Corporation expressly evaluates a Fannie Mae-type mortgage portfolio as if it were a thrift portfolio. (See the 1987 HUD Report to Congress on The Federal National Mortgage Association at p. 49). The mortgage-backed securities (MBS) business of Fannie Mae or Freddie Mac involves the credit risk, operations risk, management risk, and market risk of portfolio lending; the only major difference is that an enterprise avoids interest risk on MBSs it guarantees.

Thus, even in their MBS businesses, Fannie Mae and Freddie Mac are analytically similar (not identical) to banks and thrifts. It is time to apply the expensive lessons we have learned about bank and thrift regulation and capitalization to government sponsored enterprises.

Yours truly,

Thomas H. Stanton

Mr. Donald Campbell
Staff Director
Subcommittee on Housing and Urban Affairs
535 Dirksen Senate Office Building
Washington, D.C. 20510

THS:vrs

Enclosure

Government-Sponsored Enterprises Also Need Better Supervision

by Thomas H. Stanton

The regulatory debacle of the S&Ls bears serious implications for the other financial institutions known as Government-sponsored enterprises, Mr. Stanton, a Washington lawyer and author of an academic study on the subject,* warns in this article written for Financier. The inferred moral obligation of Government support leads to distortions of economic incentives, he contends, and the safety and soundness of these institutions must be better assured.

Although they lend about $700 billion dollars to home buyers, farmers, students and thrift institutions, Government-sponsored enterprises remain largely misunderstood. This is unfortunate because Government implicitly guarantees the obligations of these institutions and has a vital stake in their financial safety and soundness.

The decline of the thrift industry will mean greater reliance on enterprises, especially Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), that provide a secondary market for an increasing volume of residential mortgages that once might have been held by thrift institutions. Also, increasing concern about interest-rate risk and application to banks of significant risk-based capital requirements may mean that the credit markets increasingly rely on other Government-sponsored enterprises for other kinds of loans as well.

Enterprises are perhaps best understood in comparison to thrift institutions. Enterprises differ from thrifts in size and their nation-wide markets, and in the particular form of the Federal Government's implicit guarantee. They resemble thrifts in their confinement by law to specialized lending activities. Fannie Mae and Freddie Mac purchase home mortgages in the secondary market, Sallie Mae funds student loans, the Farm Credit System deals in agricultural loans, the Federal Home Loan Banks lend to thrift institutions and the Financing Corporation (FICO) is helping to bail out the Federal Savings and Loan Insurance Corporation. A seventh enterprise, Farmer Mac, is about to begin funding agricultural mortgages. The Bush Administration has proposed yet another Government-sponsored enterprise, to be called the Resolution Funding Corporation, that would provide at least $50 billion in new off-Budget financing for FSLIC.

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* Government Sponsored Enterprises: Their Benefits and Costs as Instruments of Federal Policy; Banking Research Fund of the Association of Reserve City Bankers. Mr. Stanton is an attorney with the law firm of Olewine, Connelly, Chase, O'Donnell and Weyher.

Enterprises also resemble thrifts in the effects of the implicit Federal backing that reassures their creditors, weakens market discipline and permits risky lending. Perhaps the most important lesson of the insolvency of many Federally-insured thrifts has been the need for effective regulation and significant capital requirements to reduce risk taking and help correct for the distorted incentives caused by Government's backing. It is time\to apply this lesson to enterprises as well as thrifts. Otherwise, we risk repeating today's thrift insolvency problems with a different set of financial institutions.

Enterprises tend to be very large; Fannie Mae, Freddie Mac and the Federal Home Loan Bank System each fund or guarantee well over $100 billion of loans. Sallie Mae, one of the smaller enterprises, is a $30 billion institution, growing at about 25% per year. In part, enterprises can grow large because their charters permit service to a national market without regard to the kind of branching and geographic restrictions the laws traditionally have imposed on banks and thrifts.

Similarities are Considerable

Except for size and geographic market, the similarities between enterprises and thrifts are considerable. Like many thrifts, enterprises are privately owned, Federally-chartered institutions. Both kinds of institutions are specialized lenders. They are instrumentalities of the US, and their charters preempt state laws and some taxes. They do not receive regular Federal appropriations to support their lending activity and are completely free from Federal Budget restrictions. Just as Government provides Federal insurance for thrift deposits, it provides an implicit guarantee of enterprise borrowing that significantly reduces the institutions' cost of funds.

While the implicit guarantee is peculiar to the Government-sponsored enterprises, it has economic effects similar to deposit insurance. Enterprise charters each include a fairly standard set of governmental characteristics permitting the market to infer Federal backing without an express statement to that effect.

First, Government appoints some members of most enterprise Boards of Directors.

Second, each enterprise has a line of credit directly or indirectly from the Treasury.

Third, with some variations, enterprise obligations have many of the attributes of Treasury securities. These include an exemption of enterprise securities from registration requirements and their eligibility as investments for pension and trust funds and for banks and thrifts without regard to the usual legal limits. Like Treasury securities, enterprise obligations and mortgage-backed securities are transferred on the books of the Federal Reserve System.

Perception of a Guarantee

These characteristics lead investors to see a close relationship between enterprises and the Federal Government amounting to an implicit Federal guarantee that enterprises will not be allowed to default on their obligations. Enterprise securities would not be exempt from registration and other investor protections unless they were extremely safe. Athough Government's backing is only inferred—a "moral" rather than a contractual obligation—it is very strong. Even after the Farm Credit System lost $4.6 billion in two years, for example, Standard & Poor's announced that FCS obligations qualified as AAA investments.

As the enterprises have grown in size, Government's moral obligation has become practical as well. Since Government's bailout of creditors of the Continental Illinois Corporation in 1984, Federal officials have confirmed their unwillingness to permit default by any of the nation's largest financial institutions. In asset size, Fannie Mae, FHLBS and FCS each are much larger than was Continental Illinois. Enterprises are too big to fail, especially since a default of one would cause all enterprise securities — the whole $700 billion — to plummet in value. As with Federal deposit insurance, the financial markets expect Government to live up to its implicit and indirect commitments even though enterprises lack an express full-faith-and-credit Federal guarantee.

The "Moral Hazard"

As Federally-insured thrifts have taught us, implicit Federal backing weakens market discipline and creates enormous incentive to take risks. Economists call this "moral hazard"; private institutions profit from risky ventures while taxpayers pay for the big mistakes.

The implicit Federal guarantee means that investors can look to Government rather than to an enterprise's creditworthiness for assurance that their investment will be repaid. Federal backing thereby permits management to engage in risky activities without fear of driving away investors or having to pay prohibitive rates of interest to attract funds. While some managers may resist the temptations of moral hazard, Government must protect against losses by those who succumb. Without effective oversight, Government can face substantial exposure from risky lending by some fraction of the institutions — such as thrifts, banks and enterprises — whose activities it somehow guarantees.

Risk taking can take a variety of forms. In the late '70s, for example, Fannie Mae made the mistake of many thrift institutions and funded a huge portfolio of long-term mortgages with short-term borrowings. When interest rates rose, Fannie Mae's funding mismatch resulted in substantial losses by 1981. Fannie Mae's market value net worth that year has been estimated at a negative $10.8 billion. Only energetic new management strategies and declining interest rates saved the enterprise from calamity.

The FCS was not as lucky. Again abetted by its implicit Federal backing, FCS institutions undertook substantial interest rate risks (this time funding short-term lending with longer-term borrowings) and credit risks, and failed to price loans properly.

By 1981 FCS institutions were offering farm borrowers loans at rates of interest five percentage points below competing rural lenders. When the agricultural economy went into decline, FCS announced it could not meet its obligations without Federal assistance.

Model for the FSLIC Bailout

The Farm Credit experience highlights the costs of implicit Federal backing: Unsafe and unsound practices can lead to demands for Government to compensate creditors who relied on the guarantee. Congress has now established a $4 billion off-Budget program, the Financial Assistance Corporation, to pay for the restructuring or closing of Farm Credit institutions. Because its borrowings do not show up immediately in the Federal Budget, this has become a model for the Administration's proposed bailout of the insolvent FSLIC.

A major lesson from FSLIC's failure is that Government must effectively regulate safety and soundness to limit its risk exposure. There is a substantial body of economic literature on this point. Yet just as the FHLBB failed to supervise thrift institutions effectively, so too Government has failed to oversee the safety and soundness of the enterprises.

The Department of Housing and Urban Development, Fannie Mae's regulator, lacks the capacity or expertise to oversee the financial condition of Fannie Mae and its $290 billion in assets and mortgage-backed securities. Congress is about to assign to HUD the task of overseeing Freddie Mac as well. The department is likely to be overwhelmed by responsibility for two enterprises with combined assets and mortgage-backed securities amounting to more than half a trillion dollars. The Farm Credit Administration regulates the farm credit institutions, including a new enterprise called Farmer Mac. Before 1985 the FCA lacked independence from the regulated Farm Credit institutions; Government only turned FCA into a serious financial regulator after FCS posted multi-billion dollar losses. Sallie Mae has no financial regulator at all.

Centralize in a Single Regulator

It is time to provide for oversight of these huge financial institutions along the lines of Federal supervision of commercial banks. Enterprises should be subject to the kind of risk-based capital requirements and regulatory supervision Government requires for banks. Preferably, regulation of safety and soundness of all enterprises should be centralized in a single regulator with responsibilities, powers and capabilities similar to those of the FDIC or the Comptroller of the Currency. This should be done before rather than after another enterprise gets into trouble.

Today Does Not Assure Tomorrow

Fortunately, most enterprises have been well run despite the moral hazard created by the implicit Federal guarantee. The problem is that, just as was true of thrifts, the legal confinement of enterprises to making specialized kinds of loans—home mortgages or student loans or advances to thrift institutions, for example—means that profitability today cannot assure financial soundness tomorrow. Because of the lack of diversity, one systematic problem with excessive credit risk or interest risk or inadequate management systems can suddenly translate into substantial financial damage. As the '80s have taught us, rapidly changing financial circumstances can topple large financial institutions with surprising speed. It is time now for Government to institute effective regulation of enterprise safety and soundness and to reduce the likelihood of further unpleasant surprises in the financial markets. ❑

Question for Mr. David Maxwell from Senator Donald W. Riegle, Jr., February 7, 1990.

Q.1. Fannie Mae and Freddie Mac have very similar public purposes. Your firm chooses to hold a large portfolio of mortgages in addition to your less-risky, guaranteed securities program; Freddie Mac does not. What do you see as the public benefits of a large mortgage portfolio at Fannie Mae?

ANSWER:

As noted in the written statement of February 7, the portfolio has been a critical tool in our effort to fulfilling our government-mandated mission in terms of innovation, liquidity, and building capital. Through the portfolio, Fannie Mae has been able to "incubate" innovative products that are at first illiquid. The size of the portfolio enables us to buy such new products in substantial volume. This encourages lenders to develop new types of home loans to address evolving borrower needs and changes in marketplace.

For example, Fannie Mae injected tremendous liquidity into the infant, experimental ARM in the early 1980s. Fannie Mae also took the lead in developing a secondary market for intermediate-term home loans, and certain types of balloon products.

Maintaining a portfolio of significant size is a crucial factor in Fannie Mae's ability to act as a supplementary market force, particularly in periods of reduced liquidity. The size of the portfolio allows the company to serve as an effective countercyclical market force on a national scale. As a smaller institution, Fannie Mae would not be able to purchase a sufficient volume of originations to provide meaningful supplemental liquidity during the periods when it is most needed.

This public benefit is best understood by examining the pattern of portfolio growth during times of significant stress in the primary mortgage market or extreme volatility in interest rates. Indeed, the most rapid growth of the portfolio has generally occurred during periods of volatile or rising interest rates, and was highest when Treasury yields either declined or rose precipitously. A more detailed explanation of this phenomenon is provided at page 31 of the formal written statement of February 7 of Chairman David O. Maxwell.

Fannie Mae's frequent new debt issues and the large volume of debentures outstanding which fund the portfolio draw added funds from investors (such as life insurance companies) indirectly to the mortgage market. Investors are attracted to the debentures primarily due to the credit quality and predictable maturity. These investors would not invest nearly the same level of funds directly in mortgage securities because their portfolios cannot accommodate the unpredictable payment characteristics of mortgages. Also, some such institutions are barred from such investments by law or by their by-laws or charters. Reducing the size of the Fannie Mae portfolio, and thus the debentures funding it, would likely cause much of this investment to shift away from the mortgage market.

The significant size of the portfolio and the market's acceptance of Fannie Mae's debt securities also permit Fannie Mae to introduce new and innovative debt securities or tap foreign sources of funds through currency swaps or foreign currency issue. This in turn broadens the investor base available to support domestic residential home financing.

The size of the portfolio also makes a major contribution to Fannie Mae's earnings growth potential. Efficient management of the portfolio has enabled the company to widen the annualized net interest margin on the portfolio from 31 basis points at the end of 1985 to 123 basis points at the end of 1989. Net interest income represented 71 percent of total income (pre-tax, before administrative expenses and provision for losses) in 1989, when the company posted record profits and added over $700 million to its equity capital account. A well-managed portfolio of the size of Fannie Mae's thus offers the opportunity for the company to maximize earnings and accumulate added capital more quickly, than would be the case for a structure that sharply limited the size of the portfolio.

Finally, it is important to recognize that Fannie Mae's mortgage portfolio is not "large" in terms of the overall U.S. mortgage market. Nor has it grown proportionately to the overall market. For example, at the end of 1989, Fannie Mae's mortgage portfolio of $110.7 billion (unpaid principal balance: net portfolio was $107.8 billion) was little more than four percent of the total amount of residential mortgage debt outstanding in the United States. In 1983, Fannie Mae's mortgage portfolio represented just under six percent of residential mortgage debt outstanding.

QUESTION FROM SENATOR PRESSLER:

Do you favor lessening any of the present credit requirements on insured home loan mortgages? If so, just what do you propose be done? How will your business be affected by lowering the credit standards?

Your question refers to "insured" home loan mortgages. I interpret the question to refer to Fannie Mae's underwriting standards, rather than to the underwriting standards that apply to federal insurance programs. Fannie Mae continually analyzes its underwriting standards relative to the credit quality and delinquency experience of the mortgage loans that are in our portfolio and those that back our mortgage securities. If this analysis demonstrates that changes are appropriate (lessening or tightening), we will make them.

Our underwriting guidelines attempt to strike a delicate balance between providing affordable funds to home buyers and managing credit risk. We want to cast the widest possible net over the universe of credit worthy borrowers while maintaining standards that assure investor confidence in our mortgages and in the company itself.

We continually review and monitor our guidelines to ensure that they fully support local, state and federal laws relating to fair housing, equal credit opportunity, truth in lending and discrimination in residential lending.

In 1985, Fannie Mae -- among many other financial institutions -- experienced mounting delinquencies. We took a hard look at our credit and appraisal guidelines. As a result, we tightened the income and credit requirements for loans with low borrower equity. We also discovered that the "payment shock" potential of uncapped adjustable-rate mortgages (ARMs) was a major cause of delinquency and default, and we discontinued purchasing ARMs without rate caps and ARMs with graduated payment features.

Also, we reduced other high risk factors in connection with low-equity loans by limiting the use of "buydowns," strengthening the rules on down payments by co-borrowers, and requiring a minimum five percent down payment in addition to funds received as a gift toward the purchase of a home.

In 1988, we refined these standards to loosen some provisions that had proven unnecessarily restrictive, and to provide further clarification of other provisions. We reintroduced specific anti-redlining language in our neighborhood analysis guidelines. We also eliminated restrictions related to zoning standards for non-conforming use; emphasized our flexibility related to the borrower's previous credit history and to the use of part-time income in qualifying lower-income applicants; and made other deletions and additions that emphasized flexibility on issues such as loans with maximum financing, down payment requirements, and evaluation procedures for neighborhood conformity that ensure a non-discriminatory interpretation. In addition we included affirmative (rather than neutral) language encouraging lenders to sell us mortgages to assist neighborhood revitalization efforts.

It should be noted that these underwriting standards are intended to be used flexibly as guidelines rather than limitations. Lenders have a great deal of latitude in approving mortgages that diverge from the specific standards set out in the guides. It should be noted also that we do a significant amount of business as "negotiated transactions," meaning that one or more of our standard credit requirements may not apply at all.

Our Office of Low- and Moderate-Income Housing provides additional resources and flexibility for low- and moderate-income financing that does not fit under our standard guidelines. Our community lending is done on a negotiated transaction basis. One such recent example is our $500 million dollar agreement with GEMICO and several community groups to purchase loans designed to facilitate homeownership for low and moderate homebuyers. This demonstration program allows borrowers to qualify for a mortgage with less income than would be required under our standard guidelines. It allows non-traditional methods for establishing creditworthiness and provides several other changes from our standard guidelines. Such negotiated transactions also provide us further experience for consideration of future across-the-board changes to our standard requirements.

We believe that our current standards achieve an appropriate balance. While no immediate changes in credit standards are planned, as noted above, our guidelines are continually reviewed, and further changes can be expected based on experience.